

URO-B-0001 PCT1 listage sequence DEPOT  
SEQUENCE LISTING

<110> UNIVERSITE DE ROUEN  
IFREMER  
ALGENICS  
BARDOR, Muriel  
LOUVET, Romain  
SAINT-JEAN, Bruno  
BUREL, Carole  
BAIET, Bérangère  
CARLIER, Aude  
CADORET, Jean-Paul  
LEROUGE, Patrice

<120> N GLYCOSYLATION IN TRANSFORMED PHAEODACTYLUM TRICORNUTUM

<130> URO-B-0001 PCT1

<160> 81

<170> PatentIn version 3.5

<210> 1

<211> 444

<212> PRT

<213> Phaeodactylum tricornutum

<400> 1

Met Arg Leu Trp Lys Arg Thr Thr Ser Gly Val Pro Pro Pro Arg Arg  
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20 25 30

Thr Leu Ala Val Val Trp Gly Thr Val Leu Val Gly Thr Leu Val Ala  
35 40 45

Leu Val Ala Ser Pro Thr Lys Ser Val Pro Thr Phe Pro Thr Val Pro  
50 55 60

Thr Asp Ser Arg Pro Ser Ala Ala Phe Val Val Ser Asp Ala Pro Gly  
65 70 75 80

Ala Tyr Glu Ser Pro Leu Leu Val Phe Thr Cys Arg Arg Asp Gln Tyr  
85 90 95

Leu Arg Glu Thr Leu Arg Asp Ile Trp Asn Tyr Ile Pro Thr Asp Cys  
100 105 110

Ser Val Gly Cys Pro Leu Val Ile Ser Gln Asp Gly Asn Asp Pro Ala  
115 120 125

Val Arg Arg Val Val Arg Glu Phe Thr Asp Glu Phe Ala Thr Lys Asn  
130 135 140

Val Pro Val Ile His Trp Thr His Thr Ser Ala Leu Arg Gly Ser Thr  
145 150 155 160

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Asn Gly Tyr Gln Ala Leu Ala Ile His Tyr Gly Trp Ala Leu Arg Arg  
165 170 175

Val Phe Asp Gly Gln Thr Leu Ser Gly Ser Val His Gly Ala Lys His  
180 185 190

Gly Thr Pro Gln Arg Val Ile Ile Leu Glu Glu Asp Leu His Val Ala  
195 200 205

Pro Asp Phe Phe Asp Tyr Phe Ala Ala Thr Ala Pro Leu Leu Asp His  
210 215 220

Asp Ser Ser Leu Leu Ala Val Ser Ala Phe His Asp Asn Gly Phe Ala  
225 230 235 240

His Asn Val Arg Asn Ala Ser Arg Ile Leu Arg Ser Asp Phe Phe Pro  
245 250 255

Gly Leu Gly Trp Met Met Asn Arg Arg Leu Trp Val Asp Glu Leu Gln  
260 265 270

Ser Lys Trp Pro Gly Gly Tyr Trp Asp Asp Trp Leu Arg Glu Pro Ala  
275 280 285

Gln Arg Gln Asp Arg Ala Ile Leu Arg Pro Glu Ile Ser Arg Thr Tyr  
290 295 300

His Phe Gly Thr Glu Gly Gly Thr Ser Ser Asn Gln Phe Gly Ser His  
305 310 315 320

Leu Ser Lys Ile Leu Leu Asn Arg Glu Thr Val Asp Trp Ser Lys Ala  
325 330 335

Ala Asp Leu Glu Ala Gln Leu Arg Pro Glu Val Tyr Asp Pro Ala Tyr  
340 345 350

Trp Ala Met Val Gln Ala Ser Thr Leu Thr Tyr Thr Ile Pro Asp Ala  
355 360 365

Leu Glu Gln Ala Lys Lys Ser Asn Ala Arg Leu Gln Tyr Thr Thr Ile  
370 375 380

Glu Gln Phe Lys Tyr Leu Ala His Lys Leu Lys Leu Met Ala Asp Glu  
385 390 395 400

Lys Ala Asn Val Pro Arg Thr Ala Tyr Lys Gly Ile Val Glu Thr Arg  
405 410 415

Pro His Gly Ala Asp Tyr Phe Leu Phe Leu Thr Pro Pro Leu Ala Glu  
420 425 430

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Leu Gln Lys Glu Phe Asp Ile Pro Ser Pro Lys Arg  
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<210> 2  
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<212> DNA  
<213> Phaeodactylum tricornutum

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tcaccgaaaa ga 1332

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<211> 1047  
<212> DNA  
<213> Phaeodactylumtricornutum

<400> 3  
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 <212> PRT  
 <213> *Phaeodactylum tricornutum*  
 <400> 4

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Val	Gly	Cys	Pro	Leu	Val	Ile	Ser	Gln	Asp	Gly	Asn	Asp	Pro	Ala	Val
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Gln	Arg	Val	Val	Arg	Glu	Phe	Thr	Asp	Glu	Phe	Ala	Thr	Lys	Asn	Val
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Pro	Val	Val	His	Trp	Thr	His	Thr	Ser	Ala	Leu	Arg	Gly	Gly	Thr	Asn
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Phe	Asp	Gly	Gln	Thr	Leu	Ser	Gly	Ser	Val	His	Gly	Ala	Lys	His	Gly
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Thr Pro Lys Arg Val Ile Ile Leu Glu Glu Asp Leu His Val Ala Pro  
115 120 125

Asp Phe Phe Asp Tyr Phe Ala Ala Thr Ala Pro Leu Leu Asp His Asp  
130 135 140

Ser Ser Leu Leu Ala Val Ser Ala Phe His Asp Asn Gly Phe Ala His  
145 150 155 160

Asn Val Arg Asn Ala Ser Arg Ile Leu Arg Ser Asp Phe Phe Pro Gly  
165 170 175

Leu Gly Trp Met Met Asn Arg Arg Leu Trp Val Asp Glu Leu Gln Ser  
180 185 190

Lys Trp Pro Gly Gly Tyr Trp Asp Asp Trp Leu Arg Glu Pro Ala Gln  
195 200 205

Arg Gln Asp Arg Ala Ile Leu Arg Pro Glu Ile Ser Arg Thr Tyr His  
210 215 220

Phe Gly Thr Glu Gly Gly Thr Ser Ser Asn Gln Phe Gly Ser His Leu  
225 230 235 240

Ser Lys Ile Leu Leu Asn Arg Glu Thr Val Asp Trp Ser Lys Ala Val  
245 250 255

Asp Leu Glu Ala Gln Leu Arg Pro Glu Val Tyr Asp Pro Ala Tyr Trp  
260 265 270

Ala Met Val Gln Ala Ser Thr Leu Thr Tyr Thr Ile Pro Asp Ala Leu  
275 280 285

Glu Gln Ala Lys Lys Ser Asn Ala Arg Leu Gln Tyr Thr Thr Ile Glu  
290 295 300

Gln Phe Lys Tyr Leu Ala His Lys Leu Lys Leu Met Ala Asp Glu Lys  
305 310 315 320

Ala Asn Val Pro Arg Thr Ala Tyr Lys Gly Ile Val Glu Thr Arg Pro  
325 330 335

His Gly Ala Asp Asn Phe Leu Phe Leu Thr Pro Pro Leu Ala Glu Leu  
340 345 350

Gln Lys Glu Phe Asp Ile Pro Ser Pro Lys Arg  
355 360

<210> 5  
<211> 1256  
<212> PRT  
<213> Phaeodactylum tricornutum

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<400> 5

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Ala Gln Pro Leu Gln Val Phe Val Val Pro His Ser His Cys Asp Pro  
35 40 45

Gly Trp Ile Lys Thr Phe Asp Asp Tyr Phe Gln Ser Gln Thr Arg Gln  
50 55 60

Ile Leu Thr Thr Val Val Gln Ala Leu Gln Arg Asp Gln Arg Arg Lys  
65 70 75 80

Phe Ile Trp Ala Glu Ile Ser Tyr Phe Glu Trp Trp Tyr Arg Glu Gln  
85 90 95

Lys Asp Asp Thr Arg Lys Val Val Gln Thr Leu Leu Asp Asn Lys Gln  
100 105 110

Leu Gln Phe Val Thr Gly Gly Trp Val Gln Pro Asp Glu Ala Asn Ser  
115 120 125

Glu Leu Tyr Ala Met Glu Ile Gln Leu Gln Glu Gly His Asp Trp Ile  
130 135 140

Arg Gln Thr Phe Gly Asp Ala His Val Pro Lys His Gly Trp Ser Ile  
145 150 155 160

Asp Pro Phe Gly Tyr Ser Pro Thr Met Ala Tyr Leu Leu Gln Lys Tyr  
165 170 175

Gly Phe Lys Ala Met Leu Ile Gln Arg Val His Tyr Ala Val Lys Lys  
180 185 190

Glu Leu Ala Gln Arg Arg His Leu Glu Phe Tyr Trp Arg Gln Thr Trp  
195 200 205

Glu Asp Ala Thr Thr Ala Gly Thr His Asp Ile Phe Thr His Val Met  
210 215 220

Pro Phe Phe Ser Tyr Asp Val Pro His Thr Cys Gly Pro Asp Pro Ser  
225 230 235 240

Val Cys Cys Gln Phe Asp Phe Gln Arg Thr Thr Cys Pro Trp Leu Lys  
245 250 255

Ala Pro Gln Thr Ile Thr Ser Lys Asn Val Ala Glu Arg Ala Met Leu

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260 265 270

Leu Leu Asp Gln Tyr Arg Lys Lys Ala Ala Leu Tyr Arg Ser Asn Val  
275 280 285

Val Leu Ala Pro Leu Gly Asp Asp Phe Arg Tyr Leu Thr Ala Gln Glu  
290 295 300

Ala Glu Ala Gln Tyr Thr Asn Tyr Gln Ala Ile Phe Asp Tyr Val Asn  
305 310 315 320

Ala Asn Leu Pro Asn Val Lys Met Gln Phe Gly Thr Leu Ser Asp Tyr  
325 330 335

Phe Asp Ala Val Val Gly Ser Phe Asp Thr Pro Ile Leu Gln Gly Ser  
340 345 350

Phe Phe Thr Tyr Ser Asp Ile Asp Gln Asp Tyr Trp Ser Gly Tyr Phe  
355 360 365

Thr Ser Arg Val Ser Asp Lys Ala Leu Gly Arg Trp Leu Glu Arg Val  
370 375 380

Leu Tyr Ser Ala Thr Gln Met Gly Ala Ser Lys Gln Asp Leu Gln Ala  
385 390 395 400

Pro Arg Arg Ala Leu Ser Leu Phe Gln His His Asp Gly Val Thr Gly  
405 410 415

Thr Ala Lys Thr His Val His Glu Asp Tyr Ala Arg Gln Met Met Asp  
420 425 430

Ala Ile His Thr Thr Glu Asp Trp Met Leu Arg Ala Ile His Gln Gln  
435 440 445

Tyr Gly Thr Glu Leu Gln Pro Leu Leu Thr Ala Asp Thr Thr Ala Gly  
450 455 460

Ala Ile Gln Pro Cys Trp Val Ala Pro Glu Pro Arg Thr Met Pro Glu  
465 470 475 480

Asn Ala Cys Glu Ser Glu Tyr Thr Val Asp Ser Ala Ala Ser Ser Pro  
485 490 495

Pro Ala Leu Val Ala Val Tyr Asn Pro Leu Ser Thr Ser Gln His Cys  
500 505 510

Gly Asn Val Val Val Pro Gly Gln Lys Leu Arg Thr Ala Thr Leu Pro  
515 520 525

Cys Glu Leu Pro Gly Pro Thr Ser Val Ser Gln Thr Lys Phe Val Phe

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530

535

540

His Pro Glu Thr Gly Leu Met Leu Glu Pro Val Lys Glu Glu Trp Lys  
545 550 555 560

Val Trp Lys Val Lys Lys Gly Gly Ala Tyr Leu Phe Phe Pro Gly Gln  
565 570 575

Leu Arg Ser Tyr Glu Leu Thr Lys His Asp Val Ile Ile Glu Asp Gly  
580 585 590

Gly Tyr Val Val Ser Thr Glu Ser Trp Lys Arg Thr Val Val Glu Arg  
595 600 605

Glu Ile Pro Thr Asp Phe Gly Ile Ser Ser Thr Val Ile Asp Phe Val  
610 615 620

Tyr Glu Thr Thr Leu Ile Glu Gly Asn Arg Glu Trp Phe Val Arg Phe  
625 630 635 640

Ser Gly Asn Val Ala Asn Asn Gly Ile Phe His Thr Asp Leu Asn Gly  
645 650 655

Phe Asn Phe Asp Thr His Tyr Phe Arg Ala Asp Met Pro Ile Gln Ser  
660 665 670

Gln Val Phe Pro Met Pro Thr Met Ser Ala Ile Gln Asp Asp Gln Thr  
675 680 685

Arg Leu Thr Val Leu Ser Glu His Ala Gln Gly Ala Ala Ser Leu Gln  
690 695 700

Asp Gly Ala Ile Asp Val Trp Leu Asp Arg Arg Leu Asp Gln Asp Asp  
705 710 715 720

Asp Arg Gly Leu Gly Gln Gly Ile Ser Asp Asn Arg Pro Thr Arg Thr  
725 730 735

Arg Leu Arg Val Val Val Glu Arg Glu Thr Phe Asn Val Gln Lys Glu  
740 745 750

Phe Asp Val Thr Pro Leu Val Arg Arg Thr Trp Asp Glu Leu Gln His  
755 760 765

Pro Leu Val Leu Phe Gly Lys His Val Lys Lys Ser Ile Asp Leu Val  
770 775 780

Ala Asp Pro Trp Lys His Arg Ser Asp Ser Glu Ala Arg Gln Ala Arg  
785 790 795 800

Arg Glu Arg Gln Arg Gln Gln Arg Ala Arg Glu Arg Gln Arg Gln Leu



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805 810 815

Gln Glu Lys Glu Glu Lys Arg Gly Ala Gly Asp Gln Gln Leu Phe Val  
820 825 830

Asn Asp Lys Pro Lys Glu Ser Ala Leu Lys Gly Phe Trp Asn Thr Gly  
835 840 845

Ile Ile Thr Ser Asp Phe Phe Gly Phe Phe Arg Lys Ala Ser Glu Thr  
850 855 860

Leu Pro Lys Asp Gln Gly His Glu Asp Gly Lys Gln Leu Gln Lys Met  
865 870 875 880

Pro Gly Lys Thr Arg Val Ser Lys Gly Asn Arg Arg His Arg His Pro  
885 890 895

Pro Val Asp Ser Phe Gln Arg Lys Phe Leu Val Asn Asp Ala Asp Trp  
900 905 910

Met Asn Gly Gly Arg Ser Tyr Ala Ser Arg Lys Thr Arg Glu Ile Lys  
915 920 925

Asn Arg Arg Phe Thr Met Lys Asn Thr Asp Ile Pro Phe Val Leu Met  
930 935 940

Val Tyr Lys Arg Val Asp Tyr Leu Lys Lys Ala Ile Asp Ser Val Arg  
945 950 955 960

Arg Ser Asp Phe Pro Lys Ser Arg Val Pro Leu Ile Ile Ser His Asp  
965 970 975

Gly Arg Val Pro Glu Val Val Glu Tyr Val Glu Ser Leu Lys Asp Glu  
980 985 990

Phe Lys Ile Ile Gln Leu Ile His Pro His Ser Cys Tyr Glu His Pro  
995 1000 1005

Asn Glu Phe Pro Gly Asp Asp Pro Thr Leu Asn Glu Gly Phe Ala  
1010 1015 1020

Gly Asp Ser Tyr Gly Asn Pro Arg Ser Ala Trp Ile Thr Cys Cys  
1025 1030 1035

Lys His His Phe Thr Trp Met Leu His Thr Val Phe Arg Arg Asp  
1040 1045 1050

Phe Thr Asp Pro Ala Val Asp Thr Phe Leu Phe Leu Glu Glu Asp  
1055 1060 1065

Tyr Ile Val Ala Pro Thr Ile Tyr Ser Ala Val Ile Ala Gly Leu

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1070

1075

1080

Asn Val Met Glu Asp Met Asp Lys Glu Ile Pro Gly Gly Phe Phe  
1085 1090 1095

Gly Leu Gly Met Asp Pro Ser Met Ala Asn Thr Ala Phe Glu Pro  
1100 1105 1110

Tyr Tyr Lys Lys Ala Thr Trp Tyr Val Glu Ala Phe Lys Ser Gly  
1115 1120 1125

Pro Met Thr Met Asn Arg Asp Met Phe Lys Lys Leu Gln Gln His  
1130 1135 1140

Ala Lys Glu Tyr Cys Thr Phe Asp Asp Tyr Asn Trp Asp Trp Ser  
1145 1150 1155

Ile Val His Leu Gln Ser Lys Lys Leu Leu Pro Arg Thr Leu Leu  
1160 1165 1170

Met Pro Ser Lys Val Leu Ala Lys His Ile Gly Val Lys Glu Gly  
1175 1180 1185

Met His Thr Asn Lys Ser Phe Gly Lys Asp Phe Ser Asp Leu Phe  
1190 1195 1200

Pro Asn Tyr Ala Pro Arg Arg Glu Gln Leu Thr Thr His Phe Ala  
1205 1210 1215

Glu Tyr Arg Phe Thr Gly Asn Thr Ala Ala Ala Leu His Thr Glu  
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His Cys Met Lys Val Leu Gln Ser  
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<210> 6  
<211> 3771  
<212> DNA  
<213> Phaeodactylum tricornutum

<400> 6  
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gctgggttga atgttatgga agacatggac aaggagattc cgggcggctt cttcggtttg	3300
ggtatggatc cgagtatggc gaatactgcc tttgagcctt actacaagaa ggcgacgtgg	3360
tatgtcgaag cattcaagtc aggtccgatg acgatgaacc gggacatgtt caaaaagctc	3420
caacaacatg ctaaggagta ctgtacgttc gacgattaca attgggattg gtccattgtc	3480
catctacaaa gtaaaaagtt actaccacgg actcttctca tgccaagcaa agtcctagca	3540
aaacatattg gtgtcaagga gggatgcac acgaacaaat cttttgaaa agacttttca	3600
gattttattt ccaactatgc cctcgtcgc gagcagctga ccacgcattt tgcggaatac	3660
cgttttaccg ggaacaccgc ggcagcttta cacaccgaat tcaatcccgg ttatggtggt	3720
tggggacatc cgaaagacca cgagcactgc atgaaagtgc tacagtcgta a	3771

<210> 7  
 <211> 1000  
 <212> DNA  
 <213> Phaeodactylum tricornutum

<400> 7	
tacaattatc gagcgcactc tcgagagcgc agtagacgga ggggtgaccg tcactaccgg	60
aaattgtttt gggcccccg tggtagcacc aagactcaag agaagaacag aaaacacagt	120
acgcagcata cgcgacactt tgtcgatgaa ctgcaactac aggctaccct cgcaagtatt	180
ctctaaaggc agcaatcctg tgacacttgc tcggttggtc ccgtctctca atccaatccg	240
cacggaagga tcgatatcgg attggatttc ggcagataag acgaccgtac agtgagtgc	300
gggtcgacac tgtccagcct tgttggtgtt ttccatccca ctcgttctct agcagattca	360
ctcttgatc tacgcaagca acggcttata acctaaatta ctactccaaa tgattcgcag	420

URO-B-0001 PCT1 listage sequence DEPOT

tcgcaccggt gccaacggca ctaacggcgc ggtaccagcc cgtacgagtc cgaccaatc	480
ctcctccgcg ttgctcgaat ctccctccac cacaacgtcg tcagtgcggt ccaccactaa	540
cctaaacagt aaccacaact ccgtttccgt cagccgattc tcccgttggc ttttggcacc	600
atcccgggcg tccccgtcgc cgccaacact ctcacctccg gcgcgcgtgg cacgcaaadc	660
acgtctccga cggcgacccc tggcctcggc ttccgcgcgc aaggcgtcca ccttgcgtca	720
ccatctcgga tgggttgctc ccctcgctct cgtattactc gcaactctta cgctcgtgct	780
ttttgtgagt atttatttac tcgaaaccac tgccaatgcc ggcgtctcta cggcggaggg	840
ctccaatgtg gtatcccccc gtcgtgcctt ttggcaacaa cacttgcgac ggctgcacc	900
ttccgacaca gccgtggtac caactgatca cgccatgcat cgaccttccg gtgctaccat	960
cggaacaaaa atcagtagca aacccgaaga ctggattgat	1000

<210> 8  
 <211> 1220  
 <212> PRT  
 <213> Phaeodactylum tricornutum  
 <400> 8

Gln Val Phe Val Val Pro His Ser His Cys Asp Pro Gly Trp Ile Lys  
 1 5 10 15

Thr Phe Asp Asp Tyr Phe Gln Ser Gln Thr Arg Gln Ile Leu Thr Thr  
 20 25 30

Val Val Gln Ala Leu Gln Arg Asp Gln Arg Arg Lys Phe Ile Trp Ala  
 35 40 45

Glu Ile Ser Tyr Phe Glu Trp Trp Tyr Arg Glu Gln Lys Asp Asp Thr  
 50 55 60

Arg Lys Val Val Gln Thr Leu Leu Asp Asn Lys Gln Leu Gln Phe Val  
 65 70 75 80

Thr Gly Gly Trp Val Gln Pro Asp Glu Ala Asn Ser Glu Leu Tyr Ala  
 85 90 95

Met Glu Ile Gln Leu Gln Glu Gly His Asp Trp Ile Arg Gln Thr Phe  
 100 105 110

Gly Asp Ala His Val Pro Lys His Gly Trp Ser Ile Asp Pro Phe Gly  
 115 120 125

Tyr Ser Pro Thr Met Ala Tyr Leu Leu Gln Lys Tyr Gly Phe Lys Ala  
 130 135 140

Met Leu Ile Gln Arg Val His Tyr Ala Val Lys Lys Glu Leu Ala Gln  
 145 150 155 160

URO-B-0001 PCT1 listage sequence DEPOT

Arg Arg His Leu Glu Phe Tyr Trp Arg Gln Thr Trp Glu Asp Ala Thr  
165 170 175

Thr Ala Gly Thr His Asp Ile Phe Thr His Val Met Pro Phe Phe Ser  
180 185 190

Tyr Asp Val Pro His Thr Cys Gly Pro Asp Pro Ser Val Cys Cys Gln  
195 200 205

Phe Asp Phe Gln Arg Thr Thr Cys Pro Trp Leu Lys Ala Pro Gln Thr  
210 215 220

Ile Thr Ser Lys Asn Val Ala Glu Arg Ala Met Leu Leu Leu Asp Gln  
225 230 235 240

Tyr Arg Lys Lys Ala Ala Leu Tyr Arg Ser Asn Val Val Leu Ala Pro  
245 250 255

Leu Gly Asp Asp Phe Arg Tyr Leu Thr Ala Gln Glu Ala Glu Ala Gln  
260 265 270

Tyr Thr Asn Tyr Gln Ala Ile Phe Asp Tyr Val Asn Ala Asn Leu Pro  
275 280 285

Asn Val Lys Met Gln Phe Gly Thr Leu Ser Asp Tyr Phe Asp Ala Val  
290 295 300

Val Gly Ser Phe Asp Thr Pro Ile Leu Gln Gly Ser Phe Phe Thr Tyr  
305 310 315 320

Ser Asp Ile Asp Gln Asp Tyr Trp Ser Gly Tyr Phe Thr Ser Arg Val  
325 330 335

Ser Asp Lys Ala Leu Gly Arg Trp Leu Glu Arg Val Leu Tyr Ser Ala  
340 345 350

Thr Gln Met Gly Ala Ser Lys Gln Asp Leu Gln Ala Pro Arg Arg Ala  
355 360 365

Leu Ser Leu Phe Gln His His Asp Gly Val Thr Gly Thr Ala Lys Thr  
370 375 380

His Val His Glu Asp Tyr Ala Arg Gln Met Met Asp Ala Ile His Thr  
385 390 395 400

Thr Glu Asp Trp Met Leu Arg Ala Ile His Gln Gln Tyr Gly Thr Glu  
405 410 415

Leu Gln Pro Leu Leu Thr Ala Asp Thr Thr Ala Gly Ala Ile Gln Pro  
420 425 430

URO-B-0001 PCT1 listage sequence DEPOT

Cys Trp Val Ala Pro Glu Pro Arg Thr Met Pro Glu Asn Ala Cys Glu  
435 440 445

Ser Glu Tyr Thr Val Asp Ser Ala Ala Ser Ser Pro Pro Ala Leu Val  
450 455 460

Ala Val Tyr Asn Pro Leu Ser Thr Ser Gln His Cys Gly Asn Val Val  
465 470 475 480

Val Pro Gly Gln Lys Leu Arg Thr Ala Thr Leu Pro Cys Glu Leu Pro  
485 490 495

Gly Pro Thr Ser Val Ser Gln Thr Lys Phe Val Phe His Pro Glu Thr  
500 505 510

Gly Leu Met Leu Glu Pro Val Lys Glu Glu Trp Lys Val Trp Lys Val  
515 520 525

Lys Lys Gly Gly Ala Tyr Leu Phe Phe Pro Gly Gln Leu Arg Ser Tyr  
530 535 540

Glu Leu Thr Lys His Asp Val Ile Ile Glu Asp Gly Gly Tyr Val Val  
545 550 555 560

Ser Thr Glu Ser Trp Lys Arg Thr Val Val Glu Arg Glu Ile Pro Thr  
565 570 575

Asp Phe Gly Ile Ser Ser Thr Val Ile Asp Phe Val Tyr Glu Thr Thr  
580 585 590

Leu Ile Glu Gly Asn Arg Glu Trp Phe Val Arg Phe Ser Gly Asn Val  
595 600 605

Ala Asn Asn Gly Ile Phe His Thr Asp Leu Asn Gly Phe Asn Phe Asp  
610 615 620

Thr His Tyr Phe Arg Ala Asp Met Pro Ile Gln Ser Gln Val Phe Pro  
625 630 635 640

Met Pro Thr Met Ser Ala Ile Gln Asp Asp Gln Thr Arg Leu Thr Val  
645 650 655

Leu Ser Glu His Ala Gln Gly Ala Ala Ser Leu Gln Asp Gly Ala Ile  
660 665 670

Asp Val Trp Leu Asp Arg Arg Leu Asp Gln Asp Asp Arg Gly Leu  
675 680 685

Gly Gln Gly Ile Ser Asp Asn Arg Pro Thr Arg Thr Arg Leu Arg Val  
690 695 700

URO-B-0001 PCT1 listage sequence DEPOT

Val	Val	Glu	Arg	Glu	Thr	Phe	Asn	Val	Gln	Lys	Glu	Phe	Asp	Val	Thr
705					710					715					720
Pro	Leu	Val	Arg	Arg	Thr	Trp	Asp	Glu	Leu	Gln	His	Pro	Leu	Val	Leu
				725					730					735	
Phe	Gly	Lys	His	Val	Lys	Lys	Ser	Ile	Asp	Leu	Val	Ala	Asp	Pro	Trp
			740					745					750		
Lys	His	Arg	Ser	Asp	Ser	Glu	Ala	Arg	Gln	Ala	Arg	Arg	Glu	Arg	Gln
		755					760					765			
Arg	Gln	Gln	Arg	Ala	Arg	Glu	Arg	Gln	Arg	Gln	Leu	Gln	Glu	Lys	Glu
	770					775					780				
Glu	Lys	Arg	Gly	Ala	Gly	Asp	Gln	Gln	Leu	Phe	Val	Asn	Asp	Lys	Pro
785					790					795					800
Lys	Glu	Ser	Ala	Leu	Lys	Gly	Phe	Trp	Asn	Thr	Gly	Ile	Ile	Thr	Ser
				805					810					815	
Asp	Phe	Phe	Gly	Phe	Phe	Arg	Lys	Ala	Ser	Glu	Thr	Leu	Pro	Lys	Asp
			820					825					830		
Gln	Gly	His	Glu	Asp	Gly	Lys	Gln	Leu	Gln	Lys	Met	Pro	Gly	Lys	Thr
		835					840					845			
Arg	Val	Ser	Lys	Gly	Asn	Arg	Arg	His	Arg	His	Pro	Pro	Val	Asp	Ser
	850					855					860				
Phe	Gln	Arg	Lys	Phe	Leu	Val	Asn	Asp	Ala	Asp	Trp	Met	Asn	Gly	Gly
865					870					875					880
Arg	Ser	Tyr	Ala	Ser	Arg	Lys	Thr	Arg	Glu	Ile	Lys	Asn	Arg	Arg	Phe
				885					890					895	
Thr	Met	Lys	Asn	Thr	Asp	Ile	Pro	Phe	Val	Leu	Met	Val	Tyr	Lys	Arg
			900					905					910		
Val	Asp	Tyr	Leu	Lys	Lys	Ala	Ile	Asp	Ser	Val	Arg	Arg	Ser	Asp	Phe
		915					920					925			
Pro	Lys	Ser	Arg	Val	Pro	Leu	Ile	Ile	Ser	His	Asp	Gly	Arg	Val	Pro
	930					935					940				
Glu	Val	Val	Glu	Tyr	Val	Glu	Ser	Leu	Lys	Asp	Glu	Phe	Lys	Ile	Ile
945					950					955					960
Gln	Leu	Ile	His	Pro	His	Ser	Cys	Tyr	Glu	His	Pro	Asn	Glu	Phe	Pro
				965					970					975	



URO-B-0001 PCT1 listage sequence DEPOT

Gly	Asp	Asp	Pro	Thr	Leu	Asn	Glu	Gly	Phe	Ala	Gly	Asp	Ser	Tyr	Gly
			980					985					990		

Asn	Pro	Arg	Ser	Ala	Trp	Ile	Thr	Cys	Cys	Lys	His	His	Phe	Thr	Trp
		995					1000					1005			

Met	Leu	His	Thr	Val	Phe	Arg	Arg	Asp	Phe	Thr	Asp	Pro	Ala	Val
	1010					1015					1020			

Asp	Thr	Phe	Leu	Phe	Leu	Glu	Glu	Asp	Tyr	Ile	Val	Ala	Pro	Thr
	1025					1030					1035			

Ile	Tyr	Ser	Ala	Val	Ile	Ala	Gly	Leu	Asn	Val	Met	Glu	Asp	Met
	1040					1045					1050			

Asp	Lys	Glu	Ile	Pro	Gly	Gly	Phe	Phe	Gly	Leu	Gly	Met	Asp	Pro
	1055					1060					1065			

Ser	Met	Ala	Asn	Thr	Ala	Phe	Glu	Pro	Tyr	Tyr	Lys	Lys	Ala	Thr
	1070					1075					1080			

Trp	Tyr	Val	Glu	Ala	Phe	Lys	Ser	Gly	Pro	Met	Thr	Met	Asn	Arg
	1085					1090					1095			

Asp	Met	Phe	Lys	Lys	Leu	Gln	Gln	His	Ala	Lys	Glu	Tyr	Cys	Thr
	1100					1105					1110			

Phe	Asp	Asp	Tyr	Asn	Trp	Asp	Trp	Ser	Ile	Val	His	Leu	Gln	Ser
	1115					1120					1125			

Lys	Lys	Leu	Leu	Pro	Arg	Thr	Leu	Leu	Met	Pro	Ser	Lys	Val	Leu
	1130					1135					1140			

Ala	Lys	His	Ile	Gly	Val	Lys	Glu	Gly	Met	His	Thr	Asn	Lys	Ser
	1145					1150					1155			

Phe	Gly	Lys	Asp	Phe	Ser	Asp	Leu	Phe	Pro	Asn	Tyr	Ala	Pro	Arg
	1160					1165					1170			

Arg	Glu	Gln	Leu	Thr	Thr	His	Phe	Ala	Glu	Tyr	Arg	Phe	Thr	Gly
	1175					1180					1185			

Asn	Thr	Ala	Ala	Ala	Leu	His	Thr	Glu	Phe	Asn	Pro	Gly	Tyr	Gly
	1190					1195					1200			

Gly	Trp	Gly	His	Pro	Lys	Asp	His	Glu	His	Cys	Met	Lys	Val	Leu
	1205					1210					1215			

Gln	Ser
	1220

URO-B-0001 PCT1 listage sequence DEPOT

<210> 9

<211> 1085

<212> PRT

<213> Phaeodactylum tricornutum

<400> 9

Met Gln Ser Ser Leu Arg Ala Arg Arg Gly Val Ala Pro Arg Arg Lys  
1 5 10 15

Ala Ala Val Gly Arg Tyr Gln Leu Val Leu Ala Ile Thr Leu Ser Val  
20 25 30

Ala Leu Thr Gly Leu Val Thr Thr Gln Phe Val Leu Ser Thr Ser Leu  
35 40 45

Tyr Ser Thr Gln Glu Lys Gln Gln Arg Gln Gln His Lys Ser His Ala  
50 55 60

Lys Gly Pro Asn Pro Ser Asn Leu Arg Thr Asp Ser Phe Pro Arg Glu  
65 70 75 80

Gln Leu His Val Val Val Pro Glu Glu Gln Lys Gln Ser Glu Arg Arg  
85 90 95

Leu Asn Glu Ser Ser Arg Glu His Glu Ser Arg Glu Asn Asp His Glu  
100 105 110

Asp Glu Gln Lys Thr Arg Pro Asp Ser Glu Lys Lys Asp Asp Leu Leu  
115 120 125

Thr Gln Gln Asp Gln Lys Thr Thr Lys Arg Asn Glu His Gly Pro Ala  
130 135 140

Gln Glu Gly Ile Arg Lys His Lys Thr Asp His Glu Ala Pro Glu Lys  
145 150 155 160

Val Glu Ser Pro Val Asp Glu Asp His Glu Val Gln Lys Ala His Arg  
165 170 175

Glu Thr Val Gln Lys Phe Val Asp Asp Arg Arg Val Arg Leu Lys His  
180 185 190

Arg Ile Ser Arg Pro Lys Val Ala Arg Ala Ala Ser Pro Pro Glu Val  
195 200 205

Glu Pro Gln Ile Glu Val Ala Pro Pro Pro Glu Lys Arg Pro Tyr Asp  
210 215 220

Ile Leu Asp Asp Pro Leu Gln Asn Pro Asp Phe Asn Lys Pro Ser Lys  
225 230 235 240

Pro Leu Asn Phe Thr Ala Ala Val Pro Tyr Leu Gly Val Leu Ile Asp

URO-B-0001 PCT1 listage sequence DEPOT  
245 250 255

Gly Gly Arg His Phe Phe Pro Met Asp Trp Met Lys Arg Ala Val Asp  
260 265 270

Arg Leu Ser Asp Leu Arg Tyr Asn Leu Ile His Leu Arg Leu Thr Asp  
275 280 285

Asp Gln Ala Phe Asn Val Leu Leu Asp Ser His Pro Glu Leu Ala Tyr  
290 295 300

Pro Ala Ala Val Asn Asn Pro His Gln Gln Val Trp Thr Ala Ser Glu  
305 310 315 320

Leu Arg Asp Leu Thr Ala Tyr Ala Lys Ser Lys Gly Val Ser Ile Met  
325 330 335

Pro Glu Val Asn Val Pro Gly His Ala Gly Ala Trp Ala Gly Ile Pro  
340 345 350

His Leu Val Val His Cys Pro Glu Phe Ile Cys Gln Arg Gly Tyr Gly  
355 360 365

Leu Pro Leu Asn Val Thr His His Asp Leu Lys Pro Ile Leu Thr Ser  
370 375 380

Ile Leu Lys Glu Val Val Asp Ile Phe Asp Asp Pro Pro Phe Leu His  
385 390 395 400

Leu Gly Gly Asp Glu Val Asn Met Ala Gly Pro Cys Phe Asn Glu Val  
405 410 415

Arg Ser Pro Val Phe Asn Tyr Thr Ala Phe Glu Val Val Leu Lys Glu  
420 425 430

Ile Ile Ala Asp Val Gly Tyr Pro Glu Lys Gln Val Val Arg Trp Glu  
435 440 445

Met Thr Gly Gln Ala Asn Leu Glu Arg Ala Gly Gly Val Glu Gln Phe  
450 455 460

Trp Glu Ser Tyr Pro Gly Glu Arg His Lys Ala Ala Gly Pro Phe Phe  
465 470 475 480

Ile Ser Asn Arg Leu Tyr Phe Asp Thr Asn Gln Asp Gln Asn Ala Tyr  
485 490 495

Glu Val Trp Gln Asn Thr Arg Arg Phe Tyr Val Asn Asp Tyr Gln Pro  
500 505 510

Glu Ala Val Pro Thr Ala Ile Ile Ala Gly Thr Phe Glu Leu Ser Thr

URO-B-0001 PCT1 listage sequence DEPOT

515

520

525

Thr Trp Trp Tyr Asp Arg Asn Ile Leu Gly Arg Leu Leu Ala Val Ala  
530 535 540

Leu Gly Ala Arg Asn Glu Thr Leu Pro Lys Thr Met Lys Asp Gln Asp  
545 550 555 560

His Glu Lys Met Val Leu Asp Gln Tyr Gln Val Phe Cys Asp Gln Leu  
565 570 575

Gly Tyr Ser Gln Ala Ile Cys Glu Thr Asn Gly Gly Pro Ile Ile Pro  
580 585 590

Thr Pro Glu Tyr Lys Lys Lys Trp Gly Asp Gly Trp Val Val Trp Lys  
595 600 605

Ala His Ile Cys Glu Arg Met Thr Thr Thr Glu Val Thr Lys Ala Met  
610 615 620

Arg Pro Arg Ser Ser Asp Arg Val Ala Thr Gln Ala Asn Ser Tyr Phe  
625 630 635 640

Trp Asn Val Phe Gly Phe Pro Ala His Thr His Thr Arg Val Gly Gln  
645 650 655

His Pro Thr Leu Pro Asp Asp Leu Gln Ala Leu Gln Arg His Leu Ile  
660 665 670

Pro His Cys Gly Val Met Leu Asp Thr Thr Arg Ser Leu Val Pro Ala  
675 680 685

Asp Arg Leu Gly Thr Ile Leu Thr Asp Thr Val Ala Lys Leu Gly Phe  
690 695 700

Asn Ile Ala Gln Leu Arg Leu Val Ser Asn Lys Gly Phe Thr Phe Ala  
705 710 715 720

Pro Ser Ser Leu Pro His Thr Val Gly His Ser Leu Leu Ala Thr Lys  
725 730 735

Glu Ile Lys Val Tyr Thr Arg Ser Asp Leu Met Gly Thr Val Ala Lys  
740 745 750

Ala Ser Ala Val Gly Ile Gln Met Ile Pro Glu Ile Ser Met Thr Thr  
755 760 765

Gly Ser Ala Gly Trp Tyr Glu Ser Gly Tyr Leu Ala Asn Cys Pro Asn  
770 775 780

Arg Leu Cys Glu Ile Gly Asp Ala Ser Ile Asp Val Thr Asn Pro Phe

URO-B-0001 PCT1 listage sequence DEPOT

785 790 795 800

Leu Pro Pro Thr Val Tyr Ser Leu Ile Tyr Glu Leu Arg Ser Ile Phe  
805 810 815

Ser Ser Ser Pro Tyr Ile His Leu Gly Ser Asp Glu Arg Gln Asp Ala  
820 825 830

Ala Ala Cys Tyr Gln Glu Ala Asn Pro Thr Phe His Ala Asp Val Gly  
835 840 845

Ala Phe Glu Arg Lys Met Val Lys Val Leu Glu Ala Ser Gly Ile Ala  
850 855 860

Asn Asp Ser Val Leu Arg Tyr Ala Asn Ser Gln Gly Glu Val Tyr Ser  
865 870 875 880

Asp Arg Thr Gly Gly Val Thr His Tyr Gly Pro Asp His Ala Thr Glu  
885 890 895

Ile Pro Ala Asp Ala Pro Ile Phe Val Ser Val Asp Leu Leu Arg Asp  
900 905 910

Asp Gly Trp Thr Leu Tyr Gln Arg Val Lys Glu Leu Val Ser Lys Lys  
915 920 925

Pro Leu Gly Ile Leu Ala Glu Ile Arg Thr Leu Thr Ala Pro Arg Trp  
930 935 940

Glu Gly Leu Glu Ile Pro Glu Arg Leu Leu Val Tyr Ala Met Ala Val  
945 950 955 960

Ser Glu Leu Pro Thr Tyr Ala Asn Ala Ala Leu Gly Glu Arg Tyr  
965 970 975

Gly Glu Leu Cys Arg Ala Leu Ser Asp Arg Leu Pro Gly Leu Gly Arg  
980 985 990

Arg His Asp Cys Ala Leu Pro Gly Val Val Ser Gly Lys Val Thr Phe  
995 1000 1005

Leu Ala Asp Thr Ser Thr Phe Val Gln Gln Gln Cys Gln Met Ala  
1010 1015 1020

Thr Tyr Pro Val Thr Gln His His Ala Lys Leu Val Ala Pro Arg  
1025 1030 1035

Tyr Asn Ala Thr Glu Trp Glu Gln Leu Arg Gly Ala Pro Arg Val  
1040 1045 1050

Phe Pro Ala Ala Gly Arg Asp Pro Gln Arg His His Pro Val Val

1055

## URO-B-0001 PCT1 listage sequence DEPOT

1060

1065

Ile Gly His Gly Lys Ser Gly Asp Glu Ser Pro Val Glu Ser Val  
 1070 1075 1080

Ala Ser  
 1085

<210> 10  
 <211> 3339  
 <212> DNA  
 <213> Phaeodactylum tricornutum

<400> 10  
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 cggtatcaac tggctctcgc tattacgttg tccgtcgcct tgaccggtct cgtgacaact 120  
 caatttgtgc tgtcgacttc gttgtattcc actcaagaaa agcagcaacg acagcagcac 180  
 aagagccacg caaaggggacc taatccatcc aatctaagga ccgattcttt cccgagagag 240  
 cagttgcacg tagttgtgcc ggaagaacag aaacaatcag agcggcgatt gaacgaaagc 300  
 agtcgggaac acgaatctcg agagaatgac catgaagacg agcaaaaagac ccggcccgat 360  
 tcagagaaga aagatgatct tcttacgcag caggaccaaa agacgacgaa acgaaacgaa 420  
 catggtcctg ctccaggaagg catccgcaag cacaagactg accacgaggc tcccgaaaag 480  
 gtggaatcgc cagtggatga ggaccatgaa gtccaaaagg cacacagaga aacagtgcaa 540  
 aaattcgtcg acgaccgaag agttcgcctc aagcacagaa tctctcgacc caaagtggcc 600  
 agggctgcat caccgcctga ggtggaaccg caaattgagg ttgctccgcc acccgaaaag 660  
 cgaccttatg acatttctgga tgatcccttg caaaatccag atttcaacaa accctcgaag 720  
 ccgttgaaact tcacggccgc tgtaccatat ttgggtgtac tgattgacgg ggggcgtcat 780  
 ttctttccaa tggactggat gaaacgagcc gttgatcgcc tttctgattt gcgctataat 840  
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 atcttgacga gtatcttgaa ggaagtcgtc gacatttttg atgatccgcc ctttctacat 1200  
 ttgggtgggg atgaagtcaa cgtacgtttg ttttccgtgt ggaacttttc tgtgcgttgt 1260  
 cggaaggat aaggcgtttc taaacttttt tttctctacc agatggccgg cccctgtttt 1320  
 aacgaagttc gcagtcccgt ctttaattac acggcttttcg aagttgttct taaagaaatc 1380  
 attgccgatg taggctaccc cgaaaagcaa gtggttcggt gggaaatgac cgggcaggct 1440  
 aatttggaac gcgctggcgg tgtggaacaa ttttgggagt cgtatccggg agaacggcac 1500  
 aaggctgcgg gacctttttt catttcgaac cgtttgtatt ttgatacaaa ccaggatcaa 1560

URO-B-0001 PCT1 listage sequence DEPOT

aatgcgtacg aagtttggca gaatacccga cggttttatg taaatgatta ccagcccgag	1620
gcagttccaa ccgccattat tgccggcacc tttgagttgt cgacgacttg gtggtacgat	1680
cgcaatatatt tgggacgttt gttggctggt gcgttgggtg cccgaaacga aactctacca	1740
aagacgatga aggaccaaga ccatgagaaa atggtgcttg atcaatacca agttttctgc	1800
gaccagttag gatatagcca ggcaatttgc gaaaccaacg gtggcccgat catccctacc	1860
ccggagtaca aaaagaaatg gggtgacggt tgggtagttt ggaaggcgca catctgtgaa	1920
cgcatgacga cgactgaggt aaccaaggca atgcgacccc gctctagcga ccgggtcgcc	1980
acgcaggcga acagctactt ttggaacgta tttggatttc ctgcgcacac acacacgcga	2040
gtgggccagc atccaacggt gccagacgat ctccaggccc tccagcgaca tttaattcct	2100
cattgtggcg ttatgttga tacgaccaga tccctggttc cagcggatcg gttgggaacg	2160
attttgaccg acaccgttgc aaaattgggt ttcaacatag cccagctgcg tttggtcagc	2220
aacaagggtc tcacgtttgc tccgagtagt ctaccgcata ctgtaggcca ttcgttacta	2280
gcaacgaagg agatcaagg atacactagg agtgacttga tgggtaccgt tgctaaagcg	2340
agtgcggtgg gaatccaaat gatccccgaa atcagcatga cgacaggaag tgctggttgg	2400
tacgagtcgg gctatctagc gaattgtcca aaccgtctgt gtgaaattgg tgacgcgtcg	2460
attgacgtga cgaacccgtt cttaccaccc accgtgtact cgttgatcta cgagttgcgt	2520
tccattttca gcagcagtcc ctatatcat ctcggttcgg acgagcgta agacgcggca	2580
gcttgctacc aagaagccaa tcccacgttc cacgcggacg tgggagcggt cgagcgcaaa	2640
atggtcaaag tcttgagggc gagcgggatt gcgaacgatt ctgtactgcg gtacgccaat	2700
tcgcaaggcg aggtgtacag cgaccggacg ggtggcgta cactacgg tccggaccat	2760
gcgacggaga ttcctgcgga cgcaccaata tttgtgagtg tggatttggt gcgggacgat	2820
gggtggacat tgtaccagcg ggtgaaggaa ctcgtatcga aaaagccgtt gggcatcttg	2880
gcggaaatcc gtacgttgac ggctccccgt tgggaaggcc tggagattcc ggaacgtttg	2940
ctggtgtacg ccatggccgt atcgggaattg cccacgtacg cgaacgcggc ggcactgggc	3000
gagcggtagc gggagctttg ccgggcgtta tcggatcgat tgccgggatt gggtcgtcgg	3060
cacgattgcg cgttgccggg tgctgtctcg gggaaggatga cgtttttggc cgacacgagt	3120
acctttgtgc agcagcagtg tcaaatggcg acgtatcccg tgacgcaaca ccacgccaag	3180
ttggtagcac cccggtacaa cgcgaccgag tgggagcaac tgcgcggggc gccccgcgtg	3240
tttccggcgg cgggtcggga tccccagcgg catcaccccc tcgtcatcgg gcatggaaaa	3300
tcgggggacg agtccccggt cgagtccgta gctagctag	3339

<210> 11  
 <211> 973  
 <212> PRT  
 <213> *Phaeodactylum tricornutum*  
 <400> 11

URO-B-0001 PCT1 listage sequence DEPOT

Met Glu Ser Ala Arg Ser Arg Asn Thr Arg Asp Gly Thr Arg Lys Gln  
1 5 10 15

Gly Thr Ala Arg Arg Ser Gly Gly Thr Thr Ser Ser Asn Gly Asn Gln  
20 25 30

Gly Phe Asp Glu Phe Gly Phe Gly Gln Pro Ala Phe Pro Asp Ser Ala  
35 40 45

Phe Asp Asn His Gly Phe Glu Met Pro Gln Thr Arg Ile Gln Pro Thr  
50 55 60

Lys Ile Arg Ser Arg Arg Arg Ala Ser Leu Ala Ala Ala Pro Asn Ile  
65 70 75 80

Asp Val Val Ser Glu Asn Pro Ser Ile Gly Phe Thr Asn Gln Phe Gln  
85 90 95

Ser Ser Gln Asp Glu Gln Val Ser Arg Gly Gly Ala Arg Leu Ala Lys  
100 105 110

Ala Gly Arg Ser Ser Arg Ser Met Asp Gly Ile Glu Phe Pro Thr Ala  
115 120 125

Arg Lys Asp Val Ser Ser Gln Asn Arg Pro Arg Arg Ser Gly Arg Arg  
130 135 140

Ala Ser Met Ala Thr Ser Ser Asn His Ser Leu Ser Ala Ser Asn His  
145 150 155 160

Thr Asn Pro Glu Leu Gly Tyr Gly Asp Ala Ile Pro Ser Val Ala Ala  
165 170 175

Asn His Arg Lys Gly Asp Ser Asn Ser Gly Ile Leu Asp Phe Gly Phe  
180 185 190

Gly Gly Gly Lys Asn Ala Gly Thr Ala Asn Ala Asp Tyr Gly Tyr Gly  
195 200 205

Asp Thr Met Ser Ser Gly Phe Gly Asn Phe Glu Ser Met Pro Ser Ala  
210 215 220

Pro Ser Thr Thr Pro Glu Ser Glu Arg Pro Arg Arg Ser Gly Arg Arg  
225 230 235 240

Ser Ser Ile Ser Gly Gly Leu Glu Ser Leu Arg Ser Asp Leu Arg Gly  
245 250 255

Gly Asp Leu Ser Gly Ala Pro Ser Ser Arg Val Leu Gly Gly Asn Ser  
260 265 270



URO-B-0001 PCT1 listage sequence DEPOT

Arg Ala Gln Asn Ile Val Leu Pro Met Ala Gly Pro Glu Lys Val Ala  
275 280 285

Gly Gly Asn Val Arg Arg Gly Arg Arg Gly Ser Leu Leu Gly Ser Val  
290 295 300

Gly Asn Ala Val Gly Ala Thr Met Gly Gly Phe Thr Gly Gly Asn Lys  
305 310 315 320

Asp Lys Glu Lys Leu Asp Asp Asp Thr Thr Lys Lys Ser Lys Ser Phe  
325 330 335

Leu Lys Asp Arg Lys Ala Glu Gly Arg Arg Gly Thr Thr Arg Gln Pro  
340 345 350

Ser Ala Asp Gly Asn Ile Ile Ser Ser Tyr Thr Gly Asp Arg Asp Arg  
355 360 365

Arg Arg Lys Pro Ala Ala Ser Ser Lys Thr Leu Gly Lys Glu Ser Asn  
370 375 380

Val Ser Tyr Ser Asp Arg Ile Leu Ala Gln Arg Asp Cys Ser Cys Gly  
385 390 395 400

Gly Glu Gly Ser Ser Ser Ser Gly Ser Gly Ser Ser Asp Gly Ser Ser  
405 410 415

Ala Cys Cys Arg Ser Lys Ile Trp Pro Ala Ala Arg Cys Glu Thr Tyr  
420 425 430

Arg Thr Leu Glu Ile Asp Ala Ser Ser Ser Met Thr Leu Arg Arg His  
435 440 445

Gly Leu Arg Gly Leu His Ile Ser Pro Thr Gln Ser Val Gly Asp Glu  
450 455 460

Ser Ser Phe Asp Val Asp Cys His Gly Tyr Cys Gln Asp Val Gln Ser  
465 470 475 480

Ile Leu Asp Ala Ala Tyr Val Arg Phe Leu Lys Ala Leu Arg Arg Ser  
485 490 495

Val Ser Ser Thr Pro Leu Ala His His Asp Arg Arg Glu Asn Glu Lys  
500 505 510

Val Ala Gln His Asp Asn Val Gln Ala Leu Leu Gly Ile His Ile Ser  
515 520 525

Ile Thr Thr Asn Glu Ser Ala Leu Val His Asp Ala Asp Glu Arg Tyr  
530 535 540

URO-B-0001 PCT1 listage sequence DEPOT

Gln Leu Asp Val Pro Gly Pro Thr Val Thr Glu Asn Asp Asp Asp Asp  
 545 550 555 560  
 Asp Gly Ser Tyr Ile His Leu Thr Ala Pro Thr Val Tyr Gly Ile Leu  
 565 570 575  
 His Ala Tyr Gln Ser Leu Leu Gln Leu Val Thr Phe Val Gly Arg Asp  
 580 585 590  
 Ser Gln Thr Gly Ala Phe Val Phe Ala Met Pro Asp Thr Thr Leu Ile  
 595 600 605  
 Arg Ile Arg Asp Gly Pro Val Tyr Pro Tyr Arg Gly Leu Met Ile Asp  
 610 615 620  
 Thr Ala Arg His Phe Leu Pro Leu Pro Leu Ile Leu Gln Asn Leu Asp  
 625 630 635 640  
 Ala Met Glu Ala Ser Lys Leu Asn Val Leu His Trp His Val Thr Asp  
 645 650 655  
 Ser Gln Ser Trp Pro Tyr Val Ser Thr Ala Phe Pro Glu Leu Ser Ala  
 660 665 670  
 Arg Gly Ala Phe Gly Pro Glu Glu Thr Tyr Thr Ala Thr Asp Ile Ala  
 675 680 685  
 Leu Val Val Arg Glu Ala Ala Ala Arg Ala Ile Gly Arg Ser His Pro  
 690 695 700  
 Glu Trp Leu Thr Pro Cys Gly Ser Lys Pro Arg Pro Gln Glu Pro Leu  
 705 710 715 720  
 Asp Ala Thr Asn Pro Ala Val Tyr Glu Phe Val His Arg Leu Tyr Asp  
 725 730 735  
 Glu Leu Ala Ile Leu Phe Ala His Glu Ser Phe Leu His Val Gly Gly  
 740 745 750  
 Asp Glu Val Asn Leu Asp Cys Tyr His Asn Ser Thr Thr Val Gln Arg  
 755 760 765  
 Trp Met Arg Lys His Asn Met Thr Gln Glu Leu Glu Val Leu Ser Tyr  
 770 775 780  
 Phe Glu Arg Asp Leu Leu Ser Tyr Val Thr Ala Val Leu Asn Arg Arg  
 785 790 795 800  
 Pro Ile Val Trp Gln Glu Leu Phe Asp Ser Gly Leu Gly Leu Pro Asn  
 805 810 815

URO-B-0001 PCT1 listage sequence DEPOT

Gln Thr Ile Val Asp Val Trp Lys Ser Trp Glu Pro Ser Ser Arg Tyr  
820 825 830

Asn Ala Thr Leu Arg Gly His Glu Val Ile Leu Ser Ser Cys Trp Tyr  
835 840 845

Leu Asp His Leu Asn Glu Asp Trp Gln Ser Phe Tyr Ala Cys Asp Pro  
850 855 860

Arg Glu Phe Asn Gly Thr Lys Glu Gln Lys Asn Leu Ile Leu Gly Gly  
865 870 875 880

His Ala Ser Met Trp Gly Glu Arg Val Asp Ala Thr Asn Phe Leu Ser  
885 890 895

Arg Val Trp Pro Arg Ala Ser Ala Thr Ala Glu Lys Leu Trp Thr Gly  
900 905 910

Asn Leu Thr Ala Ala Ala Asp Ser Ala Ala Ser Arg Leu Ala Ala Phe  
915 920 925

Arg Cys His Leu Val Arg Arg Gly Ile Pro Ala Ser Pro Val Gly Pro  
930 935 940

Gly Ala Ser Cys Gly Arg Gln Pro Asn Gly Phe Pro Ala Val Ile Asp  
945 950 955 960

Ser Phe His Asp Glu Glu Leu Gln Glu Gly Lys Val Thr  
965 970

<210> 12  
<211> 3341  
<212> DNA  
<213> Phaeodactylum tricornutum

<400> 12  
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agaagtggcg gtactactag tagcaatggc aatcaaggct tcgacgagtt tggatttggt 120  
caacctgcct ttccggattc tgcgtttgac aaccacggct ttgagatgcc gcaaactcga 180  
attcagccaa cgaagattcg ttcccgccgt cgagcatctt tagctgcggc gccgaacatt 240  
gacgttgtgt cggaaaaccc gtcaataggt tttaccaatc aatttcaatc ttcacaagac 300  
gaacagggtg ctcgtggtgg agcccgcttg gcaaaggcgg gacgctcatc gcgctcaatg 360  
gacggcatcg aattcccaac tgcacgcaag gacgtttcta gtcaaaatcg tcctcgtcgt 420  
tcgggtcgcc gggcttcaat ggctacttct tccaaccaca gcctttccgc ttccaatcac 480  
accaaccggg aactcgggta cggagacgcc attccgtctg ttgctgctaa ccatagaaaa 540  
ggagactcta atagcggaat tttggacttc ggctttggtg gtggttaagaa tgccggtaca 600  
gccaatgccg actacggcta cggtgacaca atgtcgtcgg gttttggtaa tttcagagtct 660

URO-B-0001 PCT1 listage sequence DEPOT

atgccatccg cgccttccac cacacccgaa tctgaacgtc cgcgtcgag cggacgacgc	720
tccagtatca gtggaggtct tgaaagtcta cggctcgact tgcgcggagg cgacctgagt	780
ggtgctccgt ctagtcgggt gttgggtgga aattctcgcg ccagaacat tgtgttgccc	840
atggccgggc cggaaaaagt ggccggtggc aatgttcgtc gtggacgtcg cggatcctta	900
ctgggtagtg ttggtaatgc agtcggagct accatggggg gattcactgg tggaaataag	960
gacaaggaaa aactcgacga cgataccacc aaaaagtcta agtcttttct aaaggatcgc	1020
aaggctgaag gtcggcgagg cacgacacgt caaccatcgg ccgatggcaa tataatctct	1080
tcctataccg gcgatcgcg cgcacgccc aagccggcag cgtcgtccaa gacctggggc	1140
aaagagagca acgtgtcgta ctcggatcgt attttagcac agcggtaaga ggcaacataa	1200
aaacacagca attcaataat ttggcgggtg acagactacc aatctaaatg tttaaagcct	1260
agcggtatag tccgctcggc caagatatag aagggcaggg aattgcagca aagtaaaggc	1320
atattagatt cagtgtacgt gatgtaccgg gaccagtgtg agagaataaa ggtccgaatg	1380
tgactcgccc gagatcgcg aatcgagaa aaacccgaga cactgtcaat ccgtttcttc	1440
gcgaaatcct ggccgctttc gcgcatttac attacatagt tcgcaccatg tgggggagac	1500
gaggactttg tcgtatttct cttctaacgt tgctattatt actattcgtt tctaacagt	1560
actgtagttg tggaggtgaa gggagcagca gtagcggtag cggtagcagt gacggtagta	1620
gtgcttgttg tcgcagcaaa atttggccgg cggctcgatg tgaaacctac cgaacactcg	1680
aaatcgatgc ttcctcctct atgacattgc gacggcacgg cttgcgagga ctgcatact	1740
cccctactca aagcgtaggg gacgaaagta gcttcgatgt ggactgccat ggatattgtc	1800
aagacgttca atcgatactg gacgccgcgt acgttcgctt tctcaaggcg ctccggcgaa	1860
gcgtgtcttc cacgcctttg gcgcatcacg accgtcgcg aaatgaaaag gtcgctcaac	1920
atgacaacgt acaggctctg ttgggcattc acatttccat tactacgaat gagtctgcac	1980
tcgtacacga cgcggacgaa cgataccaac tggacgtccc agggcctacc gtcactgaaa	2040
acgacgacga cgacgatggc agctacattc atctactgc acccaccgtc tacggcattc	2100
tgcacgccta ccaaagctta ctgcagctgg tgacgtttgt tggtagggac tctcaaacag	2160
gcgctttcgt attcgccatg ccggacacaa ccctcattcg aatccgtgat ggaccctgt	2220
atccctaccg gggactcatg atcgacacgg cccgacattt tttgccacta ccgcttatct	2280
tgcaaaactt ggacgccatg gaggccagta aactgaacgt cttgcaactg cacgtgactg	2340
attcgagtc gtggccctac gtcagtactg cttttccgga gcttagtgct cggggagcct	2400
ttggtcctga agaaacctac acggctacag atattgccct cgtcgtgcgg gaagccgccg	2460
cacgggggtat tcgggtgatt cctgaattcg atttgcctgg aactcgtaa gcgattggac	2520
gctcacatcc ggaatgggta acaccctgtg ggtccaagcc acggccgcaa gaacctttgg	2580
atgcgaccaa tccggccgtc tacgaattcg tacaccgcct ctacgacgaa ttggcaatac	2640
tccttgcgca cgaatccttt ttacacgtcg gaggagacga agtcaattta gattgttacc	2700

URO-B-0001 PCT1 listage sequence DEPOT

acaatagcac gacgggtccaa agatggatgc gaaaacacaa tatgacacag gaacttgagg 2760  
 ttctgagcta ttttgagcgt gatttgcttt cgtacgtcac cgctgtatta aatcgtcgtc 2820  
 ccattgtgtg gcaggaactc ttcgattcgg gattgggtct tcccaatcag acaattgtcg 2880  
 atgtctggaa atcgtgggaa ccttcgtcgc gatacaacgc cactttgcgg ggccacgaag 2940  
 ttattttgtc ctcgtgctgg tatctcgatc atttgaacga agattggcaa agcttctacg 3000  
 cctgtgatcc acgggagttc aacgggtacga aagaacagaa gaacttgatt ctgggcggtc 3060  
 acgcttccat gtgggggggaa cggggtggatg cgaccaactt tctatctcgt gtttggcccc 3120  
 gtgccagtgc tacggccgaa aagctgtgga caggcaactt aacagctgcg gcggattcgg 3180  
 cggttctcgc attggccgcc tttcgtgtc atttgggtccg cagaggaatt ccggccagtc 3240  
 cggtcgggtcc gggagcaagt tgcggcagac aaccaaattg tttccggct gtgatcgata 3300  
 gctttcatga cgaggagttg caggaaggaa aggttacttg a 3341

<210> 13  
 <211> 442  
 <212> PRT  
 <213> Mus musculus

<400> 13

Met Arg Phe Arg Ile Tyr Lys Arg Lys Val Leu Ile Leu Thr Leu Val  
 1 5 10 15

Val Ala Ala Cys Gly Phe Val Leu Trp Ser Ser Asn Gly Arg Gln Arg  
 20 25 30

Lys Ser Asp Ala Leu Gly Pro Pro Leu Leu Asp Ala Glu Pro Val Arg  
 35 40 45

Gly Ala Gly His Leu Ala Val Ser Val Gly Ile Arg Arg Val Ser Asn  
 50 55 60

Glu Ser Ala Ala Pro Leu Val Pro Ala Val Pro Arg Pro Glu Val Asp  
 65 70 75 80

Asn Leu Thr Leu Arg Tyr Arg Ser Leu Val Tyr Gln Leu Asn Phe Asp  
 85 90 95

Gln Met Leu Arg Asn Val Gly Asn Asp Gly Thr Trp Ser Pro Gly Glu  
 100 105 110

Leu Val Leu Val Val Gln Val His Asn Arg Pro Glu Tyr Leu Arg Leu  
 115 120 125

Leu Ile Asp Ser Leu Arg Lys Ala Gln Gly Ile Gln Glu Val Leu Val  
 130 135 140

Ile Phe Ser His Asp Phe Trp Ser Ala Glu Ile Asn Ser Leu Ile Ser

URO-B-0001 PCT1 listage sequence DEPOT

145 150 155 160

Arg Val Asp Phe Cys Pro Val Leu Gln Val Phe Phe Pro Phe Ser Ile  
165 170 175

Gln Leu Tyr Pro Asn Glu Phe Pro Gly Ser Asp Pro Arg Asp Cys Pro  
180 185 190

Arg Asp Leu Lys Lys Asn Ala Ala Leu Lys Leu Gly Cys Ile Asn Ala  
195 200 205

Glu Tyr Pro Asp Ser Phe Gly His Tyr Arg Glu Ala Lys Phe Ser Gln  
210 215 220

Thr Lys His His Trp Trp Trp Lys Leu His Phe Val Trp Glu Arg Val  
225 230 235 240

Lys Val Leu Gln Asp Tyr Thr Gly Leu Ile Leu Phe Leu Glu Glu Asp  
245 250 255

His Tyr Leu Ala Pro Asp Phe Tyr His Val Phe Lys Lys Met Trp Lys  
260 265 270

Leu Lys Gln Gln Glu Cys Pro Gly Cys Asp Val Leu Ser Leu Gly Thr  
275 280 285

Tyr Thr Thr Ile Arg Ser Phe Tyr Gly Ile Ala Asp Lys Val Asp Val  
290 295 300

Lys Thr Trp Lys Ser Thr Glu His Asn Met Gly Leu Ala Leu Thr Arg  
305 310 315 320

Asp Ala Tyr Gln Lys Leu Ile Glu Cys Thr Asp Thr Phe Cys Thr Tyr  
325 330 335

Asp Asp Tyr Asn Trp Asp Trp Thr Leu Gln Tyr Leu Thr Leu Ala Cys  
340 345 350

Leu Pro Lys Ile Trp Lys Val Leu Val Pro Gln Ala Pro Arg Ile Phe  
355 360 365

His Ala Gly Asp Cys Gly Met His His Lys Lys Thr Cys Arg Pro Ser  
370 375 380

Thr Gln Ser Ala Gln Ile Glu Ser Leu Leu Asn Ser Asn Lys Gln Tyr  
385 390 395 400

Leu Phe Pro Glu Thr Leu Val Ile Gly Glu Lys Phe Pro Met Ala Ala  
405 410 415

Ile Ser Pro Pro Arg Lys Asn Gly Gly Trp Gly Asp Ile Arg Asp His

URO-B-0001 PCT1 listage sequence DEPOT  
420 425 430

Glu Leu Cys Lys Ser Tyr Arg Arg Leu Gln  
435 440

<210> 14  
<211> 447  
<212> PRT  
<213> Homo sapiens

<400> 14

Met Arg Phe Arg Ile Tyr Lys Arg Lys Val Leu Ile Leu Thr Leu Val  
1 5 10 15

Val Ala Ala Cys Gly Phe Val Leu Trp Ser Ser Asn Gly Arg Gln Arg  
20 25 30

Lys Asn Glu Ala Leu Ala Pro Pro Leu Leu Asp Ala Glu Pro Ala Arg  
35 40 45

Gly Ala Gly Gly Arg Gly Gly Asp His Pro Ser Val Ala Val Gly Ile  
50 55 60

Arg Arg Val Ser Asn Val Ser Ala Ala Ser Leu Val Pro Ala Val Pro  
65 70 75 80

Gln Pro Glu Ala Asp Asn Leu Thr Leu Arg Tyr Arg Ser Leu Val Tyr  
85 90 95

Gln Leu Asn Phe Asp Gln Thr Leu Arg Asn Val Asp Lys Ala Gly Thr  
100 105 110

Trp Ala Pro Arg Glu Leu Val Leu Val Val Gln Val His Asn Arg Pro  
115 120 125

Glu Tyr Leu Arg Leu Leu Leu Asp Ser Leu Arg Lys Ala Gln Gly Ile  
130 135 140

Asp Asn Val Leu Val Ile Phe Ser His Asp Phe Trp Ser Thr Glu Ile  
145 150 155 160

Asn Gln Leu Ile Ala Gly Val Asn Phe Cys Pro Val Leu Gln Val Phe  
165 170 175

Phe Pro Phe Ser Ile Gln Leu Tyr Pro Asn Glu Phe Pro Gly Ser Asp  
180 185 190

Pro Arg Asp Cys Pro Arg Asp Leu Pro Lys Asn Ala Ala Leu Lys Leu  
195 200 205

Gly Cys Ile Asn Ala Glu Tyr Pro Asp Ser Phe Gly His Tyr Arg Glu  
210 215 220

URO-B-0001 PCT1 listage sequence DEPOT

Ala Lys Phe Ser Gln Thr Lys His His Trp Trp Trp Lys Leu His Phe  
225 230 235 240

Val Trp Glu Arg Val Lys Ile Leu Arg Asp Tyr Ala Gly Leu Ile Leu  
245 250 255

Phe Leu Glu Glu Asp His Tyr Leu Ala Pro Asp Phe Tyr His Val Phe  
260 265 270

Lys Lys Met Trp Lys Leu Lys Gln Gln Glu Cys Pro Glu Cys Asp Val  
275 280 285

Leu Ser Leu Gly Thr Tyr Ser Ala Ser Arg Ser Phe Tyr Gly Met Ala  
290 295 300

Asp Lys Val Asp Val Lys Thr Trp Lys Ser Thr Glu His Asn Met Gly  
305 310 315 320

Leu Ala Leu Thr Arg Asn Ala Tyr Gln Lys Leu Ile Glu Cys Thr Asp  
325 330 335

Thr Phe Cys Thr Tyr Asp Asp Tyr Asn Trp Asp Trp Thr Leu Gln Tyr  
340 345 350

Leu Thr Val Ser Cys Leu Pro Lys Phe Trp Lys Val Leu Val Pro Gln  
355 360 365

Ile Pro Arg Ile Phe His Ala Gly Asp Cys Gly Met His His Lys Lys  
370 375 380

Thr Cys Arg Pro Ser Thr Gln Ser Ala Gln Ile Glu Ser Leu Leu Asn  
385 390 395 400

Asn Asn Lys Gln Tyr Met Phe Pro Glu Thr Leu Thr Ile Ser Glu Lys  
405 410 415

Phe Thr Val Val Ala Ile Ser Pro Pro Arg Lys Asn Gly Gly Trp Gly  
420 425 430

Asp Ile Arg Asp His Glu Leu Cys Lys Ser Tyr Arg Arg Leu Gln  
435 440 445

<210> 15  
<211> 334  
<212> PRT  
<213> Phaeodactylum tricornutum  
<400> 15

Arg Ser Tyr Ala Ser Arg Lys Thr Arg Glu Ile Lys Asn Arg Arg Phe  
1 5 10 15



URO-B-0001 PCT1 listage sequence DEPOT

Thr Met Lys Asn Thr Asp Ile Pro Phe Val Leu Met Val Tyr Lys Arg  
20 25 30

Val Asp Tyr Leu Lys Lys Ala Ile Asp Ser Val Arg Arg Ser Asp Phe  
35 40 45

Pro Lys Ser Arg Val Pro Leu Ile Ile Ser His Asp Gly Arg Val Pro  
50 55 60

Glu Val Val Glu Tyr Val Glu Ser Leu Lys Asp Glu Phe Lys Ile Ile  
65 70 75 80

Gln Leu Ile His Pro His Ser Cys Tyr Glu His Pro Asn Glu Phe Pro  
85 90 95

Gly Asp Asp Pro Thr Leu Asn Glu Gly Phe Ala Gly Asp Ser Tyr Gly  
100 105 110

Asn Pro Arg Ser Ala Trp Ile Thr Cys Cys Lys His His Phe Thr Trp  
115 120 125

Met Leu His Thr Val Phe Arg Arg Asp Phe Thr Asp Pro Ala Val Asp  
130 135 140

Thr Phe Leu Phe Leu Glu Glu Asp Tyr Ile Val Ala Pro Thr Ile Tyr  
145 150 155 160

Ser Ala Val Ile Ala Gly Leu Asn Val Met Glu Asp Met Asp Lys Glu  
165 170 175

Ile Pro Gly Gly Phe Phe Gly Leu Gly Met Asp Pro Ser Met Ala Asn  
180 185 190

Thr Ala Phe Glu Pro Tyr Tyr Lys Lys Ala Thr Trp Tyr Val Glu Ala  
195 200 205

Phe Lys Ser Gly Pro Met Thr Met Asn Arg Asp Met Phe Lys Lys Leu  
210 215 220

Gln Gln His Ala Lys Glu Tyr Cys Thr Phe Asp Asp Tyr Asn Trp Asp  
225 230 235 240

Trp Ser Ile Val His Leu Gln Ser Lys Lys Leu Leu Pro Arg Thr Leu  
245 250 255

Leu Met Pro Ser Lys Val Leu Ala Lys His Ile Gly Val Lys Glu Gly  
260 265 270

Met His Thr Asn Lys Ser Phe Gly Lys Asp Phe Ser Asp Leu Phe Pro  
275 280 285

URO-B-0001 PCT1 listage sequence DEPOT

Asn Tyr Ala Pro Arg Arg Glu Gln Leu Thr Thr His Phe Ala Glu Tyr  
290 295 300

Arg Phe Thr Gly Asn Thr Ala Ala Ala Leu His Thr Glu Phe Asn Pro  
305 310 315 320

Gly Tyr Gly Gly Trp Gly His Pro Lys Asp His Glu His Cys  
325 330

<210> 16  
<211> 1002  
<212> DNA  
<213> Phaeodactylum tricornutum

<400> 16  
agatcgtagc catcgcgcaa aacccgtgaa atcaagaatc gtcgctttac aatgaagaac 60  
acggacatcc cgttcgtatt gatggtttat aagcgcgtgg attatttgaa aaaggcgatt 120  
gattcgggtcc gtcgatccga ctttccaaag tctcgtgtgc ctcttatcat ttcgcacgat 180  
ggacgagtgc cggaagtcgt tgagtatgtc gaatcgctga aagacgagtt caaaattatc 240  
caactcattc atccgcattc ttgctacgag catcccaacg agtttcctgg ggatgatccc 300  
acactcaacg aaggctttgc tggagatagc tatggtaatc cacggagtgc gtggatcacc 360  
tgctgcaaac atcatTTTTT ttggatgctt cacactgtct ttcgtcggga ctttacggac 420  
ccagcagtgg atacatTTTT gtttctcgaa gaagattaca tcgtggctcc tacgatttat 480  
tccgccgtta ttgctgggtt gaatgttatg gaagacatgg acaaggagat tccgggcggc 540  
ttcttcgggtt tgggtatgga tccgagtatg gcgaatactg cctttgagcc ttactacaag 600  
aaggcgacgt ggtatgtcga agcattcaag tcagggtccga tgacgatgaa ccgggacatg 660  
ttcaaaaagc tccaacaaca tgctaaggag tactgtacgt tcgacgatta caattgggat 720  
tggtccattg tccatctaca aagtaaaaag ttactaccac ggactcttct catgccaagc 780  
aaagtcctag caaaacatat tgggtgtcaag gaggggtatgc acacgaacaa atcctttgga 840  
aaagactttt cagattttatt tccaactat gccctcgtc gcgagcagct gaccacgcat 900  
tttgcggaat accgttttac cgggaacacc gcggcagctt tacacaccga attcaatccc 960  
ggttatggtg gttgggggaca tccgaaagac cagcagcact gc 1002

<210> 17  
<211> 538  
<212> PRT  
<213> Mus musculus

<400> 17

Met Lys Met Arg Arg Tyr Lys Leu Phe Leu Met Phe Cys Met Ala Gly  
1 5 10 15

Leu Cys Leu Ile Ser Phe Leu His Phe Phe Lys Thr Leu Ser Tyr Val  
20 25 30

URO-B-0001 PCT1 listage sequence DEPOT

Thr Phe Pro Arg Glu Leu Ala Ser Leu Ser Pro Asn Leu Val Ser Ser  
35 40 45

Phe Phe Trp Asn Asn Ala Pro Val Thr Pro Gln Ala Ser Pro Glu Pro  
50 55 60

Gly Gly Pro Asp Leu Leu Arg Thr Pro Leu Tyr Ser His Ser Pro Leu  
65 70 75 80

Leu Gln Pro Leu Ser Pro Ser Lys Ala Thr Glu Glu Leu His Arg Val  
85 90 95

Asp Phe Val Leu Pro Glu Asp Thr Thr Glu Tyr Phe Val Arg Thr Lys  
100 105 110

Ala Gly Gly Val Cys Phe Lys Pro Gly Thr Arg Met Leu Glu Lys Pro  
115 120 125

Ser Pro Gly Arg Thr Glu Glu Lys Pro Glu Val Ser Glu Gly Ser Ser  
130 135 140

Ala Arg Gly Pro Ala Arg Arg Pro Met Arg His Val Leu Ser Thr Arg  
145 150 155 160

Glu Arg Leu Gly Ser Arg Gly Thr Arg Arg Lys Trp Val Glu Cys Val  
165 170 175

Cys Leu Pro Gly Trp His Gly Pro Ser Cys Gly Val Pro Thr Val Val  
180 185 190

Gln Tyr Ser Asn Leu Pro Thr Lys Glu Arg Leu Val Pro Arg Glu Val  
195 200 205

Pro Arg Arg Val Ile Asn Ala Ile Asn Ile Asn His Glu Phe Asp Leu  
210 215 220

Leu Asp Val Arg Phe His Glu Leu Gly Asp Val Val Asp Ala Phe Val  
225 230 235 240

Val Cys Glu Ser Asn Phe Thr Ala Tyr Gly Glu Pro Arg Pro Leu Lys  
245 250 255

Phe Arg Glu Met Leu Thr Asn Gly Thr Phe Glu Tyr Ile Arg His Lys  
260 265 270

Val Leu Tyr Val Phe Leu Asp His Phe Pro Pro Gly Gly Arg Gln Asp  
275 280 285

Gly Trp Ile Ala Asp Asp Tyr Leu Arg Thr Phe Leu Thr Gln Asp Gly  
290 295 300

URO-B-0001 PCT1 listage sequence DEPOT

Val Ser Arg Leu Arg Asn Leu Arg Pro Asp Asp Val Phe Ile Ile Asp  
305 310 315 320

Asp Ala Asp Glu Ile Pro Ala Arg Asp Gly Val Leu Phe Leu Lys Leu  
325 330 335

Tyr Asp Gly Trp Thr Glu Pro Phe Ala Phe His Met Arg Lys Ser Leu  
340 345 350

Tyr Gly Phe Phe Trp Lys Gln Pro Gly Thr Leu Glu Val Val Ser Gly  
355 360 365

Cys Thr Met Asp Met Leu Gln Ala Val Tyr Gly Leu Asp Gly Ile Arg  
370 375 380

Leu Arg Arg Arg Gln Tyr Tyr Thr Met Pro Asn Phe Arg Gln Tyr Glu  
385 390 395 400

Asn Arg Thr Gly His Ile Leu Val Gln Trp Ser Leu Gly Ser Pro Leu  
405 410 415

His Phe Ala Gly Trp His Cys Ser Trp Cys Phe Thr Pro Glu Gly Ile  
420 425 430

Tyr Phe Lys Leu Val Ser Ala Gln Asn Gly Asp Phe Pro Arg Trp Gly  
435 440 445

Asp Tyr Glu Asp Lys Arg Asp Leu Asn Tyr Ile Arg Ser Leu Ile Arg  
450 455 460

Thr Gly Gly Trp Phe Asp Gly Thr Gln Gln Glu Tyr Pro Pro Ala Asp  
465 470 475 480

Pro Ser Glu His Met Tyr Ala Pro Lys Tyr Leu Leu Lys Asn Tyr Asp  
485 490 495

Gln Phe Arg Tyr Leu Leu Glu Asn Pro Tyr Arg Glu Pro Lys Ser Thr  
500 505 510

Glu Glu Gly Gly Arg Arg Asn Gln Gly Ser Asp Gly Arg Pro Ser Ala  
515 520 525

Val Arg Gly Lys Leu Asp Thr Val Glu Gly  
530 535

<210> 18  
<211> 533  
<212> PRT  
<213> Homo sapiens  
<400> 18

URO-B-0001 PCT1 listage sequence DEPOT

Met Lys Met Arg Arg Tyr Lys Leu Phe Leu Met Phe Cys Met Ala Gly  
1 5 10 15

Leu Cys Leu Ile Ser Phe Leu His Phe Phe Lys Thr Leu Ser Tyr Val  
20 25 30

Thr Phe Pro Arg Glu Leu Ala Ser Leu Ser Pro Asn Leu Val Ser Ser  
35 40 45

Phe Phe Trp Asn Asn Ala Pro Val Thr Pro Gln Ala Ser Pro Glu Pro  
50 55 60

Gly Gly Pro Asp Leu Leu Arg Thr Pro Leu Tyr Ser His Ser Pro Leu  
65 70 75 80

Leu Gln Pro Leu Pro Pro Ser Lys Ala Ala Glu Glu Leu His Arg Val  
85 90 95

Asp Leu Val Leu Pro Glu Asp Thr Thr Glu Tyr Phe Val Arg Thr Lys  
100 105 110

Ala Gly Gly Val Cys Phe Lys Pro Gly Thr Lys Met Leu Glu Arg Pro  
115 120 125

Pro Pro Gly Arg Pro Glu Glu Lys Pro Glu Gly Ala Asn Gly Ser Ser  
130 135 140

Ala Arg Arg Pro Pro Arg Tyr Leu Leu Ser Ala Arg Glu Arg Thr Gly  
145 150 155 160

Gly Arg Gly Ala Arg Arg Lys Trp Val Glu Cys Val Cys Leu Pro Gly  
165 170 175

Trp His Gly Pro Ser Cys Gly Val Pro Thr Val Val Gln Tyr Ser Asn  
180 185 190

Leu Pro Thr Lys Glu Arg Leu Val Pro Arg Glu Val Pro Arg Arg Val  
195 200 205

Ile Asn Ala Ile Asn Val Asn His Glu Phe Asp Leu Leu Asp Val Arg  
210 215 220

Phe His Glu Leu Gly Asp Val Val Asp Ala Phe Val Val Cys Glu Ser  
225 230 235 240

Asn Phe Thr Ala Tyr Gly Glu Pro Arg Pro Leu Lys Phe Arg Glu Met  
245 250 255

Leu Thr Asn Gly Thr Phe Glu Tyr Ile Arg His Lys Val Leu Tyr Val  
260 265 270

URO-B-0001 PCT1 listage sequence DEPOT

Phe Leu Asp His Phe Pro Pro Gly Gly Arg Gln Asp Gly Trp Ile Ala  
275 280 285

Asp Asp Tyr Leu Arg Thr Phe Leu Thr Gln Asp Gly Val Ser Arg Leu  
290 295 300

Arg Asn Leu Arg Pro Asp Asp Val Phe Ile Ile Asp Asp Ala Asp Glu  
305 310 315 320

Ile Pro Ala Arg Asp Gly Val Leu Phe Leu Lys Leu Tyr Asp Gly Trp  
325 330 335

Thr Glu Pro Phe Ala Phe His Met Arg Lys Ser Leu Tyr Gly Phe Phe  
340 345 350

Trp Lys Gln Pro Gly Thr Leu Glu Val Val Ser Gly Cys Thr Val Asp  
355 360 365

Met Leu Gln Ala Val Tyr Gly Leu Asp Gly Ile Arg Leu Arg Arg Arg  
370 375 380

Gln Tyr Tyr Thr Met Pro Asn Phe Arg Gln Tyr Glu Asn Arg Thr Gly  
385 390 395 400

His Ile Leu Val Gln Trp Ser Leu Gly Ser Pro Leu His Phe Ala Gly  
405 410 415

Trp His Cys Ser Trp Cys Phe Thr Pro Glu Gly Ile Tyr Phe Lys Leu  
420 425 430

Val Ser Ala Gln Asn Gly Asp Phe Pro Arg Trp Gly Asp Tyr Glu Asp  
435 440 445

Lys Arg Asp Leu Asn Tyr Ile Arg Gly Leu Ile Arg Thr Gly Gly Trp  
450 455 460

Phe Asp Gly Thr Gln Gln Glu Tyr Pro Pro Ala Asp Pro Ser Glu His  
465 470 475 480

Met Tyr Ala Pro Lys Tyr Leu Leu Lys Asn Tyr Asp Arg Phe His Tyr  
485 490 495

Leu Leu Asp Asn Pro Tyr Gln Glu Pro Arg Ser Thr Ala Ala Gly Gly  
500 505 510

Trp Arg His Arg Gly Pro Glu Gly Arg Pro Pro Ala Arg Gly Lys Leu  
515 520 525

Asp Glu Ala Glu Val  
530

URO-B-0001 PCT1 listage sequence DEPOT

<210> 19  
 <211> 535  
 <212> PRT  
 <213> Mus musculus

<400> 19

Met Arg Leu Arg Asn Gly Thr Val Ala Thr Ala Leu Val Phe Val Thr  
 1 5 10 15

Ser Phe Leu Thr Leu Ser Trp Tyr Thr Trp Gln Asn Gly Lys Glu  
 20 25 30

Lys Leu Ile Ala Tyr Gln Arg Glu Phe Leu Ala Leu Lys Glu Arg Leu  
 35 40 45

Arg Val Ala Glu His Arg Ile Ser Gln Arg Ser Ser Glu Leu Asn Thr  
 50 55 60

Ile Val Gln Gln Phe Arg Arg Ala Gly Ala Glu Thr Asn Gly Ser Lys  
 65 70 75 80

Thr Ala Leu Ser Thr Ile Ser Asp Asn Thr Ile Lys Leu Leu Lys Glu  
 85 90 95

Leu Thr Ser Lys Lys Ser Leu Arg Val Pro Ser Ile Tyr Tyr His Leu  
 100 105 110

Pro His Leu Leu Gln Asn Glu Arg Ser Leu Gln Pro Ala Val Gln Ile  
 115 120 125

Gly Ser Gly Arg Thr Gly Val Ser Ile Val Met Gly Ile Pro Thr Val  
 130 135 140

Lys Arg Glu Val Lys Ser Tyr Leu Val Glu Thr Leu His Ser Leu Ile  
 145 150 155 160

Asp Asn Leu Tyr Pro Glu Glu Lys Leu Asp Cys Val Ile Val Val Phe  
 165 170 175

Ile Gly Glu Thr Asp Leu Asp Tyr Val His Ser Val Val Ala Asn Leu  
 180 185 190

Glu Lys Glu Phe Ser Arg Glu Ile Ser Ser Gly Leu Leu Glu Ile Ile  
 195 200 205

Ser Pro Pro Glu Ser Tyr Tyr Pro Asp Leu Thr Asn Leu Lys Glu Thr  
 210 215 220

Phe Gly Asp Ser Lys Glu Arg Val Arg Trp Arg Thr Lys Gln Asn Leu  
 225 230 235 240

Asp Tyr Cys Phe Leu Met Met Tyr Ala Gln Glu Lys Gly Ile Tyr Tyr

URO-B-0001 PCT1 listage sequence DEPOT  
245 250 255

Ile Gln Leu Glu Asp Asp Ile Ile Val Lys Gln Asn Tyr Phe Asn Thr  
260 265 270

Ile Lys Asn Phe Ala Leu Gln Leu Ser Ser Glu Glu Trp Met Ile Leu  
275 280 285

Glu Phe Ser Gln Leu Gly Phe Ile Gly Lys Met Phe Gln Ala Pro Asp  
290 295 300

Leu Ala Leu Val Val Glu Phe Ile Leu Met Phe Tyr Lys Glu Lys Pro  
305 310 315 320

Ile Asp Trp Leu Leu Asp His Ile Leu Trp Val Lys Val Cys Asn Pro  
325 330 335

Glu Lys Asp Ala Lys His Cys Asp Arg Gln Lys Ala Asn Leu Arg Ile  
340 345 350

Arg Phe Arg Pro Ser Leu Phe Gln His Val Gly Leu His Ser Ser Leu  
355 360 365

Ser Gly Lys Ile Gln Lys Leu Thr Asp Lys Asp Tyr Met Lys Pro Leu  
370 375 380

Leu Leu Lys Val His Val Asn Pro Pro Ala Glu Val Ser Thr Ser Leu  
385 390 395 400

Lys Val Tyr Gln Gly His Thr Leu Glu Lys Thr Tyr Met Gly Glu Asp  
405 410 415

Phe Phe Trp Ala Ile Thr Pro Thr Ala Gly Asp Tyr Ile Leu Phe Lys  
420 425 430

Phe Asp Lys Pro Val Asn Val Glu Ser Tyr Leu Phe His Ser Gly Asn  
435 440 445

Gln Glu His Pro Gly Asp Ile Leu Leu Asn Thr Thr Val Asp Val Leu  
450 455 460

Pro Leu Lys Ser Asp Ser Leu Glu Ile Ser Lys Glu Thr Lys Asp Lys  
465 470 475 480

Arg Leu Glu Asp Gly Tyr Phe Arg Ile Gly Lys Phe Glu Tyr Gly Val  
485 490 495

Ala Glu Gly Ile Val Asp Pro Gly Leu Asn Pro Ile Ser Ala Phe Arg  
500 505 510

Leu Ser Val Ile Gln Asn Ser Ala Val Trp Ala Ile Leu Asn Glu Ile



515 URO-B-0001 PCT1 listage sequence DEPOT 520 525

His Ile Lys Lys Val Thr Ser  
530 535

<210> 20  
<211> 548  
<212> PRT  
<213> Mus musculus

<400> 20

Met Arg Leu Arg Asn Gly Thr Phe Leu Thr Leu Leu Leu Phe Cys Leu  
1 5 10 15

Cys Ala Phe Leu Ser Leu Ser Trp Tyr Ala Ala Leu Ser Gly Gln Lys  
20 25 30

Gly Asp Val Val Asp Ile Tyr Gln Arg Glu Phe Leu Ala Leu Arg Asp  
35 40 45

Arg Leu His Ala Ala Glu Gln Glu Ser Leu Lys Arg Ser Lys Glu Leu  
50 55 60

Asn Leu Val Leu Glu Glu Ile Lys Arg Ala Val Ser Glu Arg Gln Ala  
65 70 75 80

Leu Arg Asp Gly Glu Gly Asn Arg Thr Trp Gly Arg Leu Thr Glu Asp  
85 90 95

Pro Arg Leu Lys Pro Trp Asn Val Ser His Arg His Val Leu His Leu  
100 105 110

Pro Thr Val Phe His His Leu Pro His Leu Leu Ala Lys Glu Ser Ser  
115 120 125

Leu Gln Pro Ala Val Arg Val Gly Gln Gly Arg Thr Gly Val Ser Val  
130 135 140

Val Met Gly Ile Pro Ser Val Arg Arg Glu Val His Ser Tyr Leu Thr  
145 150 155 160

Asp Thr Leu His Ser Leu Ile Ser Glu Leu Ser Pro Gln Glu Lys Glu  
165 170 175

Asp Ser Val Ile Val Val Leu Ile Ala Glu Thr Asp Pro Gln Tyr Thr  
180 185 190

Ser Ala Val Thr Glu Asn Ile Lys Ala Leu Phe Pro Thr Glu Ile His  
195 200 205

Ser Gly Leu Leu Glu Val Ile Ser Pro Ser Pro His Phe Tyr Pro Asp  
210 215 220

URO-B-0001 PCT1 listage sequence DEPOT

Phe Ser Arg Leu Arg Glu Ser Phe Gly Asp Pro Lys Glu Arg Val Arg  
 225 230 235 240  
 Trp Arg Thr Lys Gln Asn Leu Asp Tyr Cys Phe Leu Met Met Tyr Ala  
 245 250 255  
 Gln Ser Lys Gly Ile Tyr Tyr Val Gln Leu Glu Asp Asp Ile Val Ala  
 260 265 270  
 Lys Pro Asn Tyr Leu Ser Thr Met Lys Asn Phe Ala Leu Gln Gln Pro  
 275 280 285  
 Ser Glu Asp Trp Met Ile Leu Glu Phe Ser Gln Leu Gly Phe Ile Gly  
 290 295 300  
 Lys Met Phe Lys Ser Leu Asp Leu Ser Leu Ile Val Glu Phe Ile Leu  
 305 310 315 320  
 Met Phe Tyr Arg Asp Lys Pro Ile Asp Trp Leu Leu Asp His Ile Leu  
 325 330 335  
 Trp Val Lys Val Cys Asn Pro Glu Lys Asp Ala Lys His Cys Asp Arg  
 340 345 350  
 Gln Lys Ala Asn Leu Arg Ile Arg Phe Lys Pro Ser Leu Phe Gln His  
 355 360 365  
 Val Gly Thr His Ser Ser Leu Ala Gly Lys Ile Gln Lys Leu Lys Asp  
 370 375 380  
 Lys Asp Phe Gly Lys His Ala Leu Arg Lys Glu His Val Asn Pro Pro  
 385 390 395 400  
 Ala Glu Val Ser Thr Ser Leu Lys Thr Tyr Gln His Phe Thr Leu Glu  
 405 410 415  
 Lys Ala Tyr Leu Arg Glu Asp Phe Phe Trp Ala Phe Thr Pro Ala Ala  
 420 425 430  
 Gly Asp Phe Ile Arg Phe Arg Phe Phe Gln Pro Leu Arg Leu Glu Arg  
 435 440 445  
 Phe Phe Phe Arg Ser Gly Asn Ile Glu His Pro Glu Asp Lys Leu Phe  
 450 455 460  
 Asn Thr Ser Val Glu Val Leu Pro Phe Asp Asn Pro Gln Ser Glu Lys  
 465 470 475 480  
 Glu Ala Leu Gln Glu Gly Arg Ser Ala Thr Leu Arg Tyr Pro Arg Ser  
 485 490 495

URO-B-0001 PCT1 listage sequence DEPOT

Pro Asp Gly Tyr Leu Gln Ile Gly Ser Phe Tyr Lys Gly Val Ala Glu  
500 505 510

Gly Glu Val Asp Pro Ala Phe Gly Pro Leu Glu Ala Leu Arg Leu Ser  
515 520 525

Ile Gln Thr Asp Ser Pro Val Trp Val Ile Leu Ser Glu Ile Phe Leu  
530 535 540

Lys Lys Ala Asp  
545

<210> 21  
<211> 478  
<212> PRT  
<213> Mus musculus

<400> 21

Met Leu Lys Phe Tyr Gln Met Lys Tyr Ile Phe Gln Ile Leu Asp Lys  
1 5 10 15

Met Arg Cys Leu Arg Lys Arg Ser Thr Val Ser Phe Leu Gly Val Leu  
20 25 30

Val Val Phe Leu Leu Phe Met Asn Leu Tyr Ile Glu Asp Ser Tyr Val  
35 40 45

Leu Glu Gly Asp Lys Gln Leu Ile Arg Glu Thr Ser Thr His Gln Leu  
50 55 60

Asn Ser Glu Arg Tyr Val His Thr Phe Lys Asp Leu Ser Asn Phe Ser  
65 70 75 80

Gly Thr Ile Asn Val Thr Tyr Arg Tyr Leu Ala Ala Thr Pro Leu Gln  
85 90 95

Arg Lys Arg Tyr Leu Thr Ile Gly Leu Ser Ser Val Lys Arg Lys Lys  
100 105 110

Gly Asn Tyr Leu Leu Asp Thr Ile Lys Ser Ile Phe Glu Gln Ser Ser  
115 120 125

Tyr Glu Glu Leu Lys Glu Ile Ser Val Val Val His Leu Ala Asp Phe  
130 135 140

Asn Ser Ser Trp Arg Asp Ala Met Val Gln Asp Ile Thr Gln Lys Phe  
145 150 155 160

Ala His His Ile Ile Ala Gly Arg Leu Met Val Ile His Ala Pro Glu  
165 170 175

URO-B-0001 PCT1 listage sequence DEPOT

Glu Tyr Tyr Pro Val Leu Asp Gly Leu Lys Arg Asn Tyr Asn Asp Pro  
 180 185 190  
 Glu Asp Arg Val Arg Phe Arg Ser Lys Gln Asn Val Asp Tyr Ala Phe  
 195 200 205  
 Leu Leu Asn Phe Cys Ala Asn Thr Ser Asp Tyr Tyr Val Met Leu Glu  
 210 215 220  
 Asp Asp Val Arg Cys Ser Arg Asn Phe Leu Thr Ala Ile Lys Lys Val  
 225 230 235 240  
 Ile Ala Ser Leu Glu Gly Thr Tyr Trp Val Thr Leu Glu Phe Ser Lys  
 245 250 255  
 Leu Gly Tyr Ile Gly Lys Leu Tyr His Ser His Asp Leu Pro Arg Leu  
 260 265 270  
 Ala His Phe Leu Leu Met Phe Tyr Gln Glu Met Pro Cys Asp Trp Leu  
 275 280 285  
 Leu Thr His Phe Arg Gly Leu Leu Ala Gln Lys Asn Val Ile Arg Phe  
 290 295 300  
 Lys Pro Ser Leu Phe Gln His Met Gly Tyr Tyr Ser Ser Tyr Lys Gly  
 305 310 315 320  
 Thr Glu Asn Lys Leu Lys Asp Asp Asp Phe Glu Glu Glu Ser Phe Asp  
 325 330 335  
 Ile Pro Asp Asn Pro Pro Ala Ser Phe Tyr Thr Asn Met Asn Val Phe  
 340 345 350  
 Glu Asn Tyr Glu Ala Ser Lys Ala Tyr Ser Ser Val Asp Glu Tyr Phe  
 355 360 365  
 Trp Gly Lys Ser Pro Ser Met Gly Asp Thr Phe Val Ile Val Phe Glu  
 370 375 380  
 Asn Pro Ile Thr Ile Lys Lys Ile Lys Val Asn Thr Gly Thr Glu Asp  
 385 390 395 400  
 Arg Gln Asn Asp Ile Leu Gln His Gly Ala Leu Asp Val Gly Glu Lys  
 405 410 415  
 Leu Ile Phe Ser Lys Gln Ile Arg Gln Cys Asp Thr Tyr Leu Arg Leu  
 420 425 430  
 Gly Glu Phe Lys Asn Gly Tyr Phe Glu Met Ser Asp Val Asn Gln Lys  
 435 440 445

URO-B-0001 PCT1 listage sequence DEPOT

Ile Pro Phe Asp Ile His Cys Met Arg Ile Cys Val Thr Lys Thr Gln  
450 455 460

Lys Glu Trp Leu Ile Ile Arg Ser Ile Ser Ile Trp Thr Ser  
465 470 475

<210> 22  
<211> 535  
<212> PRT  
<213> Homo sapiens

<400> 22

Met Arg Leu Arg Asn Gly Thr Val Ala Thr Ala Leu Ala Phe Ile Thr  
1 5 10 15

Ser Phe Leu Thr Leu Ser Trp Tyr Thr Thr Trp Gln Asn Gly Lys Glu  
20 25 30

Lys Leu Ile Ala Tyr Gln Arg Glu Phe Leu Ala Leu Lys Glu Arg Leu  
35 40 45

Arg Ile Ala Glu His Arg Ile Ser Gln Arg Ser Ser Glu Leu Asn Thr  
50 55 60

Ile Val Gln Gln Phe Lys Arg Val Gly Ala Glu Thr Asn Gly Ser Lys  
65 70 75 80

Asp Ala Leu Asn Lys Phe Ser Asp Asn Thr Leu Lys Leu Leu Lys Glu  
85 90 95

Leu Thr Ser Lys Lys Ser Leu Gln Val Pro Ser Ile Tyr Tyr His Leu  
100 105 110

Pro His Leu Leu Lys Asn Glu Gly Ser Leu Gln Pro Ala Val Gln Ile  
115 120 125

Gly Asn Gly Arg Thr Gly Val Ser Ile Val Met Gly Ile Pro Thr Val  
130 135 140

Lys Arg Glu Val Lys Ser Tyr Leu Ile Glu Thr Leu His Ser Leu Ile  
145 150 155 160

Asp Asn Leu Tyr Pro Glu Glu Lys Leu Asp Cys Val Ile Val Val Phe  
165 170 175

Ile Gly Glu Thr Asp Ile Asp Tyr Val His Gly Val Val Ala Asn Leu  
180 185 190

Glu Lys Glu Phe Ser Lys Glu Ile Ser Ser Gly Leu Val Glu Val Ile  
195 200 205

URO-B-0001 PCT1 listage sequence DEPOT

Ser	Pro	Pro	Glu	Ser	Tyr	Tyr	Pro	Asp	Leu	Thr	Asn	Leu	Lys	Glu	Thr
210							215				220				
Phe	Gly	Asp	Ser	Lys	Glu	Arg	Val	Arg	Trp	Arg	Thr	Lys	Gln	Asn	Leu
225					230					235					240
Asp	Tyr	Cys	Phe	Leu	Met	Met	Tyr	Ala	Gln	Glu	Lys	Gly	Ile	Tyr	Tyr
				245					250					255	
Ile	Gln	Leu	Glu	Asp	Asp	Ile	Ile	Val	Lys	Gln	Asn	Tyr	Phe	Asn	Thr
			260					265					270		
Ile	Lys	Asn	Phe	Ala	Leu	Gln	Leu	Ser	Ser	Glu	Glu	Trp	Met	Ile	Leu
		275					280					285			
Glu	Phe	Ser	Gln	Leu	Gly	Phe	Ile	Gly	Lys	Met	Phe	Gln	Ala	Pro	Asp
	290					295					300				
Leu	Thr	Leu	Ile	Val	Glu	Phe	Ile	Phe	Met	Phe	Tyr	Lys	Glu	Lys	Pro
305					310					315					320
Ile	Asp	Trp	Leu	Leu	Asp	His	Ile	Leu	Trp	Val	Lys	Val	Cys	Asn	Pro
				325					330					335	
Glu	Lys	Asp	Ala	Lys	His	Cys	Asp	Arg	Gln	Lys	Ala	Asn	Leu	Arg	Ile
			340					345					350		
Arg	Phe	Arg	Pro	Ser	Leu	Phe	Gln	His	Val	Gly	Leu	His	Ser	Ser	Leu
		355					360					365			
Ser	Gly	Lys	Ile	Gln	Lys	Leu	Thr	Asp	Lys	Asp	Tyr	Met	Lys	Pro	Leu
	370					375					380				
Leu	Leu	Lys	Ile	His	Val	Asn	Pro	Pro	Ala	Glu	Val	Ser	Thr	Ser	Leu
385					390					395					400
Lys	Val	Tyr	Gln	Gly	His	Thr	Leu	Glu	Lys	Thr	Tyr	Met	Gly	Glu	Asp
				405					410					415	
Phe	Phe	Trp	Ala	Ile	Thr	Pro	Ile	Ala	Gly	Asp	Tyr	Ile	Leu	Phe	Lys
			420					425					430		
Phe	Asp	Lys	Pro	Val	Asn	Val	Glu	Ser	Tyr	Leu	Phe	His	Ser	Gly	Asn
		435					440					445			
Gln	Glu	His	Pro	Gly	Asp	Ile	Leu	Leu	Asn	Thr	Thr	Val	Glu	Val	Leu
	450					455					460				
Pro	Phe	Lys	Ser	Glu	Gly	Leu	Glu	Ile	Ser	Lys	Glu	Thr	Lys	Asp	Lys
465					470					475					480

URO-B-0001 PCT1 listage sequence DEPOT  
 Arg Leu Glu Asp Gly Tyr Phe Arg Ile Gly Lys Phe Glu Asn Gly Val  
                   485                                  490                                  495

Ala Glu Gly Met Val Asp Pro Ser Leu Asn Pro Ile Ser Ala Phe Arg  
                   500                                  505                                  510

Leu Ser Val Ile Gln Asn Ser Ala Val Trp Ala Ile Leu Asn Glu Ile  
                   515                                  520                                  525

His Ile Lys Lys Ala Thr Asn  
           530                                  535

<210> 23  
 <211> 548  
 <212> PRT  
 <213> Homo sapiens  
 <400> 23

Met Arg Leu Arg Asn Gly Thr Phe Leu Thr Leu Leu Leu Phe Cys Leu  
   1                  5                                  10                                  15

Cys Ala Phe Leu Ser Leu Ser Trp Tyr Ala Ala Leu Ser Gly Gln Lys  
                   20                                  25                                  30

Gly Asp Val Val Asp Val Tyr Gln Arg Glu Phe Leu Ala Leu Arg Asp  
                   35                                  40                                  45

Arg Leu His Ala Ala Glu Gln Glu Ser Leu Lys Arg Ser Lys Glu Leu  
                   50                                  55                                  60

Asn Leu Val Leu Asp Glu Ile Lys Arg Ala Val Ser Glu Arg Gln Ala  
   65                  70                                  75                                  80

Leu Arg Asp Gly Asp Gly Asn Arg Thr Trp Gly Arg Leu Thr Glu Asp  
                   85                                  90                                  95

Pro Arg Leu Lys Pro Trp Asn Gly Ser His Arg His Val Leu His Leu  
                   100                                  105                                  110

Pro Thr Val Phe His His Leu Pro His Leu Leu Ala Lys Glu Ser Ser  
                   115                                  120                                  125

Leu Gln Pro Ala Val Arg Val Gly Gln Gly Arg Thr Gly Val Ser Val  
                   130                                  135                                  140

Val Met Gly Ile Pro Ser Val Arg Arg Glu Val His Ser Tyr Leu Thr  
   145                  150                                  155                                  160

Asp Thr Leu His Ser Leu Ile Ser Glu Leu Ser Pro Gln Glu Lys Glu  
                   165                                  170                                  175

Asp Ser Val Ile Val Val Leu Ile Ala Glu Thr Asp Ser Gln Tyr Thr

URO-B-0001 PCT1 listage sequence DEPOT  
180 185 190

Ser Ala Val Thr Glu Asn Ile Lys Ala Leu Phe Pro Thr Glu Ile His  
195 200 205

Ser Gly Leu Leu Glu Val Ile Ser Pro Ser Pro His Phe Tyr Pro Asp  
210 215 220

Phe Ser Arg Leu Arg Glu Ser Phe Gly Asp Pro Lys Glu Arg Val Arg  
225 230 235 240

Trp Arg Thr Lys Gln Asn Leu Asp Tyr Cys Phe Leu Met Met Tyr Ala  
245 250 255

Gln Ser Lys Gly Ile Tyr Tyr Val Gln Leu Glu Asp Asp Ile Val Ala  
260 265 270

Lys Pro Asn Tyr Leu Ser Thr Met Lys Asn Phe Ala Leu Gln Gln Pro  
275 280 285

Ser Glu Asp Trp Met Ile Leu Glu Phe Ser Gln Leu Gly Phe Ile Gly  
290 295 300

Lys Met Phe Lys Ser Leu Asp Leu Ser Leu Ile Val Glu Phe Ile Leu  
305 310 315 320

Met Phe Tyr Arg Asp Lys Pro Ile Asp Trp Leu Leu Asp His Ile Leu  
325 330 335

Trp Val Lys Val Cys Asn Pro Glu Lys Asp Ala Lys His Cys Asp Arg  
340 345 350

Gln Lys Ala Asn Leu Arg Ile Arg Phe Lys Pro Ser Leu Phe Gln His  
355 360 365

Val Gly Thr His Ser Ser Leu Ala Gly Lys Ile Gln Lys Leu Lys Asp  
370 375 380

Lys Asp Phe Gly Lys Gln Ala Leu Arg Lys Glu His Val Asn Pro Pro  
385 390 395 400

Ala Glu Val Ser Thr Ser Leu Lys Thr Tyr Gln His Phe Thr Leu Glu  
405 410 415

Lys Ala Tyr Leu Arg Glu Asp Phe Phe Trp Ala Phe Thr Pro Ala Ala  
420 425 430

Gly Asp Phe Ile Arg Phe Arg Phe Phe Gln Pro Leu Arg Leu Glu Arg  
435 440 445

Phe Phe Phe Arg Ser Gly Asn Ile Glu His Pro Glu Asp Lys Leu Phe



URO-B-0001 PCT1 listage sequence DEPOT

450

455

460

Asn Thr Ser Val Glu Val Leu Pro Phe Asp Asn Pro Gln Ser Asp Lys  
465 470 475 480

Glu Ala Leu Gln Glu Gly Arg Thr Ala Thr Leu Arg Tyr Pro Arg Ser  
485 490 495

Pro Asp Gly Tyr Leu Gln Ile Gly Ser Phe Tyr Lys Gly Val Ala Glu  
500 505 510

Gly Glu Val Asp Pro Ala Phe Gly Pro Leu Glu Ala Leu Arg Leu Ser  
515 520 525

Ile Gln Thr Asp Ser Pro Val Trp Val Ile Leu Ser Glu Ile Phe Leu  
530 535 540

Lys Lys Ala Asp  
545

<210> 24  
<211> 563  
<212> PRT  
<213> Homo sapiens

<400> 24

Met Ser Arg Val Ala Gly Thr Arg Thr Asp Val Asn Glu Leu Leu Gln  
1 5 10 15

Arg Trp Thr Pro Arg Cys Val Arg Trp His Thr Gly Gly Ala Arg Arg  
20 25 30

Val Ala Leu Asp Arg Pro Leu Val Thr Ala Cys Leu Pro Pro Ala Gly  
35 40 45

Asp Val Val Asp Val Tyr Gln Arg Glu Phe Leu Ala Leu Arg Asp Arg  
50 55 60

Leu His Ala Ala Glu Gln Glu Ser Leu Lys Arg Ser Lys Glu Leu Asn  
65 70 75 80

Leu Val Leu Asp Glu Ile Lys Arg Ala Val Ser Glu Arg Gln Ala Leu  
85 90 95

Arg Asp Gly Asp Gly Asn Arg Thr Trp Gly Arg Leu Thr Glu Asp Pro  
100 105 110

Arg Leu Lys Pro Trp Asn Gly Ser His Arg His Val Leu His Leu Pro  
115 120 125

Thr Val Phe His His Leu Pro His Leu Leu Ala Lys Glu Ser Ser Leu  
130 135 140

URO-B-0001 PCT1 listage sequence DEPOT

Gln Pro Ala Val Arg Val Gly Gln Gly Arg Thr Gly Val Ser Val Val  
145 150 155 160

Met Gly Ile Pro Ser Val Arg Arg Glu Val His Ser Tyr Leu Thr Asp  
165 170 175

Thr Leu His Ser Leu Ile Ser Glu Leu Ser Pro Gln Glu Lys Glu Asp  
180 185 190

Ser Val Ile Val Val Leu Ile Ala Glu Thr Asp Ser Gln Tyr Thr Ser  
195 200 205

Ala Val Thr Glu Asn Ile Lys Ala Leu Phe Pro Thr Glu Ile His Ser  
210 215 220

Gly Leu Leu Glu Val Ile Ser Pro Ser Pro His Phe Tyr Pro Asp Phe  
225 230 235 240

Ser Arg Leu Arg Glu Ser Phe Gly Asp Pro Lys Glu Arg Val Arg Trp  
245 250 255

Arg Thr Lys Gln Asn Leu Asp Tyr Cys Phe Leu Met Met Tyr Ala Gln  
260 265 270

Ser Lys Gly Ile Tyr Tyr Val Gln Leu Glu Asp Asp Ile Val Ala Lys  
275 280 285

Pro Asn Tyr Leu Ser Thr Met Lys Asn Phe Ala Leu Gln Gln Pro Ser  
290 295 300

Glu Asp Trp Met Ile Leu Glu Phe Ser Gln Leu Gly Phe Ile Gly Lys  
305 310 315 320

Met Phe Lys Ser Leu Asp Leu Ser Leu Ile Val Glu Phe Ile Leu Met  
325 330 335

Phe Tyr Arg Asp Lys Pro Ile Asp Trp Leu Leu Asp His Ile Leu Trp  
340 345 350

Val Lys Val Cys Asn Pro Glu Lys Asp Ala Lys His Cys Asp Arg Gln  
355 360 365

Lys Ala Asn Leu Arg Ile Arg Phe Lys Pro Ser Leu Phe Gln His Val  
370 375 380

Gly Thr His Ser Ser Leu Ala Gly Lys Ile Gln Lys Leu Lys Asp Lys  
385 390 395 400

Asp Phe Gly Lys Gln Ala Leu Arg Lys Glu His Val Asn Pro Pro Ala  
405 410 415

URO-B-0001 PCT1 listage sequence DEPOT

Glu Val Ser Thr Ser Leu Lys Thr Tyr Gln His Phe Thr Leu Glu Lys  
420 425 430

Ala Tyr Leu Arg Glu Asp Phe Phe Trp Ala Phe Thr Pro Ala Ala Gly  
435 440 445

Asp Phe Ile Arg Phe Arg Phe Phe Gln Pro Leu Arg Leu Glu Arg Phe  
450 455 460

Phe Phe Arg Ser Gly Asn Ile Glu His Pro Glu Asp Lys Leu Phe Asn  
465 470 475 480

Thr Ser Val Glu Val Leu Pro Phe Asp Asn Pro Gln Ser Asp Lys Glu  
485 490 495

Ala Leu Gln Glu Gly Arg Thr Ala Thr Leu Arg Tyr Pro Arg Ser Pro  
500 505 510

Asp Gly Tyr Leu Gln Ile Gly Ser Phe Tyr Lys Gly Val Ala Glu Gly  
515 520 525

Glu Val Asp Pro Ala Phe Gly Pro Leu Glu Ala Leu Arg Leu Ser Ile  
530 535 540

Gln Thr Asp Ser Pro Val Trp Val Ile Leu Ser Glu Ile Phe Leu Lys  
545 550 555 560

Lys Ala Asp

<210> 25  
<211> 478  
<212> PRT  
<213> Homo sapiens

<400> 25

Met Phe Lys Phe His Gln Met Lys His Ile Phe Glu Ile Leu Asp Lys  
1 5 10 15

Met Arg Cys Leu Arg Lys Arg Ser Thr Val Ser Phe Leu Gly Val Leu  
20 25 30

Val Ile Phe Leu Leu Phe Met Asn Leu Tyr Ile Glu Asp Ser Tyr Val  
35 40 45

Leu Glu Gly Asp Lys Gln Leu Ile Arg Glu Thr Ser Thr His Gln Leu  
50 55 60

Asn Ser Glu Arg Tyr Val His Thr Phe Lys Asp Leu Ser Asn Phe Ser  
65 70 75 80

URO-B-0001 PCT1 listage sequence DEPOT

Gly Ala Ile Asn Val Thr Tyr Arg Tyr Leu Ala Ala Thr Pro Leu Gln  
85 90 95

Arg Lys Arg Tyr Leu Thr Ile Gly Leu Ser Ser Val Lys Arg Lys Lys  
100 105 110

Gly Asn Tyr Leu Leu Glu Thr Ile Lys Ser Ile Phe Glu Gln Ser Ser  
115 120 125

Tyr Glu Glu Leu Lys Glu Ile Ser Val Val Val His Leu Ala Asp Phe  
130 135 140

Asn Ser Ser Trp Arg Asp Ala Met Val Gln Asp Ile Thr Gln Lys Phe  
145 150 155 160

Ala His His Ile Ile Ala Gly Arg Leu Met Val Ile His Ala Pro Glu  
165 170 175

Glu Tyr Tyr Pro Ile Leu Asp Gly Leu Lys Arg Asn Tyr Asn Asp Pro  
180 185 190

Glu Asp Arg Val Lys Phe Arg Ser Lys Gln Asn Val Asp Tyr Ala Phe  
195 200 205

Leu Leu Asn Phe Cys Ala Asn Thr Ser Asp Tyr Tyr Val Met Leu Glu  
210 215 220

Asp Asp Val Arg Cys Ser Lys Asn Phe Leu Thr Ala Ile Lys Lys Val  
225 230 235 240

Ile Ala Ser Leu Glu Gly Thr Tyr Trp Val Thr Leu Glu Phe Ser Lys  
245 250 255

Leu Gly Tyr Ile Gly Lys Leu Tyr His Ser His Asp Leu Pro Arg Leu  
260 265 270

Ala His Phe Leu Leu Met Phe Tyr Gln Glu Met Pro Cys Asp Trp Leu  
275 280 285

Leu Thr His Phe Arg Gly Leu Leu Ala Gln Lys Asn Val Ile Arg Phe  
290 295 300

Lys Pro Ser Leu Phe Gln His Met Gly Tyr Tyr Ser Ser Tyr Lys Gly  
305 310 315 320

Thr Glu Asn Lys Leu Lys Asp Asp Asp Phe Glu Glu Glu Ser Phe Asp  
325 330 335

Ile Pro Asp Asn Pro Pro Ala Ser Leu Tyr Thr Asn Met Asn Val Phe  
340 345 350

URO-B-0001 PCT1 listage sequence DEPOT

Glu Asn Tyr Glu Ala Ser Lys Ala Tyr Ser Ser Val Asp Glu Tyr Phe  
355 360 365

Trp Gly Lys Pro Pro Ser Thr Gly Asp Val Phe Val Ile Val Phe Glu  
370 375 380

Asn Pro Ile Ile Ile Lys Lys Ile Lys Val Asn Thr Gly Thr Glu Asp  
385 390 395 400

Arg Gln Asn Asp Ile Leu His His Gly Ala Leu Asp Val Gly Glu Asn  
405 410 415

Val Met Pro Ser Lys Gln Arg Arg Gln Cys Ser Thr Tyr Leu Arg Leu  
420 425 430

Gly Glu Phe Lys Asn Gly Asn Phe Glu Met Ser Gly Val Asn Gln Lys  
435 440 445

Ile Pro Phe Asp Ile His Cys Met Arg Ile Tyr Val Thr Lys Thr Gln  
450 455 460

Lys Glu Trp Leu Ile Ile Arg Ser Ile Ser Ile Trp Thr Ser  
465 470 475

<210> 26  
<211> 740  
<212> PRT  
<213> Mus musculus

<400> 26

Met Ala Phe Phe Ser Pro Trp Lys Leu Ser Ser Gln Lys Leu Gly Phe  
1 5 10 15

Phe Leu Val Thr Phe Gly Phe Ile Trp Gly Met Met Leu Leu His Phe  
20 25 30

Thr Ile Gln Gln Arg Thr Gln Pro Glu Ser Ser Ser Met Leu Arg Glu  
35 40 45

Gln Ile Leu Asp Leu Ser Lys Arg Tyr Ile Lys Ala Leu Ala Glu Glu  
50 55 60

Asn Arg Asp Val Val Asp Gly Pro Tyr Ala Gly Val Met Thr Ala Tyr  
65 70 75 80

Asp Leu Lys Lys Thr Leu Ala Val Leu Leu Asp Asn Ile Leu Gln Arg  
85 90 95

Ile Gly Lys Leu Glu Ser Lys Val Asp Asn Leu Val Asn Gly Thr Gly  
100 105 110

URO-B-0001 PCT1 listage sequence DEPOT

Ala	Asn	Ser	Thr	Asn	Ser	Thr	Thr	Ala	Val	Pro	Ser	Leu	Val	Ser	Leu
	115						120					125			
Glu	Lys	Ile	Asn	Val	Ala	Asp	Ile	Ile	Asn	Gly	Val	Gln	Glu	Lys	Cys
	130					135					140				
Val	Leu	Pro	Pro	Met	Asp	Gly	Tyr	Pro	His	Cys	Glu	Gly	Lys	Ile	Lys
145					150					155					160
Trp	Met	Lys	Asp	Met	Trp	Arg	Ser	Asp	Pro	Cys	Tyr	Ala	Asp	Tyr	Gly
				165					170					175	
Val	Asp	Gly	Thr	Ser	Cys	Ser	Phe	Phe	Ile	Tyr	Leu	Ser	Glu	Val	Glu
			180					185					190		
Asn	Trp	Cys	Pro	Arg	Leu	Pro	Trp	Arg	Ala	Lys	Asn	Pro	Tyr	Glu	Glu
		195					200					205			
Ala	Asp	His	Asn	Ser	Leu	Ala	Glu	Ile	Arg	Thr	Asp	Phe	Asn	Ile	Leu
	210					215					220				
Tyr	Gly	Met	Met	Lys	Lys	His	Glu	Glu	Phe	Arg	Trp	Met	Arg	Leu	Arg
225					230					235					240
Ile	Arg	Arg	Met	Ala	Asp	Ala	Trp	Ile	Gln	Ala	Ile	Lys	Ser	Leu	Ala
				245					250					255	
Glu	Lys	Gln	Asn	Leu	Glu	Lys	Arg	Lys	Arg	Lys	Lys	Ile	Leu	Val	His
			260					265					270		
Leu	Gly	Leu	Leu	Thr	Lys	Glu	Ser	Gly	Phe	Lys	Ile	Ala	Glu	Thr	Ala
		275					280					285			
Phe	Ser	Gly	Gly	Pro	Leu	Gly	Glu	Leu	Val	Gln	Trp	Ser	Asp	Leu	Ile
	290					295					300				
Thr	Ser	Leu	Tyr	Leu	Leu	Gly	His	Asp	Ile	Arg	Ile	Ser	Ala	Ser	Leu
305					310					315					320
Ala	Glu	Leu	Lys	Glu	Ile	Met	Lys	Lys	Val	Val	Gly	Asn	Arg	Ser	Gly
				325					330					335	
Cys	Pro	Thr	Val	Gly	Asp	Arg	Ile	Val	Glu	Leu	Ile	Tyr	Ile	Asp	Ile
			340					345					350		
Val	Gly	Leu	Ala	Gln	Phe	Lys	Lys	Thr	Leu	Gly	Pro	Ser	Trp	Val	His
		355					360					365			
Tyr	Gln	Cys	Met	Leu	Arg	Val	Leu	Asp	Ser	Phe	Gly	Thr	Glu	Pro	Glu
	370					375					380				

URO-B-0001 PCT1 listage sequence DEPOT

Phe Asn His Ala Ser Tyr Ala Gln Ser Lys Gly His Lys Thr Pro Trp  
 385 390 395 400

Gly Lys Trp Asn Leu Asn Pro Gln Gln Phe Tyr Thr Met Phe Pro His  
 405 410 415

Thr Pro Asp Asn Ser Phe Leu Gly Phe Val Val Glu Gln His Leu Asn  
 420 425 430

Ser Ser Asp Ile His His Ile Asn Glu Ile Lys Arg Gln Asn Gln Ser  
 435 440 445

Leu Val Tyr Gly Lys Val Asp Ser Phe Trp Lys Asn Lys Lys Ile Tyr  
 450 455 460

Leu Asp Ile Ile His Thr Tyr Met Glu Val His Ala Thr Val Tyr Gly  
 465 470 475 480

Ser Ser Thr Lys Asn Ile Pro Ser Tyr Val Lys Asn His Gly Ile Leu  
 485 490 495

Ser Gly Arg Asp Leu Gln Phe Leu Leu Arg Glu Thr Lys Leu Phe Val  
 500 505 510

Gly Leu Gly Phe Pro Tyr Glu Gly Pro Ala Pro Leu Glu Ala Ile Ala  
 515 520 525

Asn Gly Cys Ala Phe Leu Asn Pro Lys Phe Asn Pro Pro Lys Ser Ser  
 530 535 540

Lys Asn Thr Asp Phe Phe Ile Gly Lys Pro Thr Leu Arg Glu Leu Thr  
 545 550 555 560

Ser Gln His Pro Tyr Ala Glu Val Phe Ile Gly Arg Pro His Val Trp  
 565 570 575

Thr Val Asp Leu Asn Asn Arg Glu Glu Val Glu Asp Ala Val Lys Ala  
 580 585 590

Ile Leu Asn Gln Lys Ile Glu Pro Tyr Met Pro Tyr Glu Phe Thr Cys  
 595 600 605

Glu Gly Met Leu Gln Arg Ile Asn Ala Phe Ile Glu Lys Gln Asp Phe  
 610 615 620

Cys His Gly Gln Val Met Trp Pro Pro Leu Ser Ala Leu Gln Val Lys  
 625 630 635 640

Leu Ala Glu Pro Gly Gln Ser Cys Lys Gln Val Cys Gln Glu Ser Gln  
 645 650 655

URO-B-0001 PCT1 listage sequence DEPOT  
 Leu Ile Cys Glu Pro Ser Phe Phe Gln His Leu Asn Lys Glu Lys Asp  
 660 665 670

Leu Leu Lys Tyr Lys Val Thr Cys Gln Ser Ser Glu Leu Tyr Lys Asp  
 675 680 685

Ile Leu Val Pro Ser Phe Tyr Pro Lys Ser Lys His Cys Val Phe Gln  
 690 695 700

Gly Asp Leu Leu Leu Phe Ser Cys Ala Gly Ala His Pro Thr His Gln  
 705 710 715 720

Arg Ile Cys Pro Cys Arg Asp Phe Ile Lys Gly Gln Val Ala Leu Cys  
 725 730 735

Lys Asp Cys Leu  
 740

<210> 27  
 <211> 792  
 <212> PRT  
 <213> Mus musculus

<400> 27

Met Ile Thr Val Asn Pro Asp Gly Lys Ile Met Val Arg Arg Cys Leu  
 1 5 10 15

Val Thr Leu Arg Pro Phe Arg Leu Phe Val Leu Gly Ile Gly Phe Phe  
 20 25 30

Thr Leu Cys Phe Leu Met Thr Ser Leu Gly Gly Gln Phe Ser Ala Arg  
 35 40 45

Arg Leu Gly Asp Ser Pro Phe Thr Ile Arg Thr Glu Val Pro Gly Ser  
 50 55 60

Pro Glu Ser Arg Gly Ala Leu Arg Lys Met Ser Asp Leu Leu Glu Leu  
 65 70 75 80

Met Val Lys Arg Met Asp Met Leu Ala Arg Leu Glu Asn Ser Ser Glu  
 85 90 95

Leu His Arg Thr Ala Ser Val Ala His Leu Ala Ala Asp Arg Leu Thr  
 100 105 110

Pro Gly Ala Ser Leu Ile Glu Arg Ile Gln Ala Ile Ala Gln Asn Val  
 115 120 125

Ser Asp Ile Ala Val Lys Val Asp Gln Ile Leu Arg His Ser Leu Ile  
 130 135 140

Leu His Ser Lys Val Ser Glu Gly Arg Arg Asp Gln Cys Glu Ala Pro



URO-B-0001 PCT1 listage sequence DEPOT

145 150 155 160

Ser Asp Pro Lys Phe Pro Asp Cys Ser Gly Lys Val Glu Trp Met Arg  
165 170 175

Ala Arg Trp Thr Ser Asp Pro Cys Tyr Ala Phe Phe Gly Val Asp Gly  
180 185 190

Thr Glu Cys Ser Phe Leu Ile Tyr Leu Ser Glu Val Glu Trp Phe Cys  
195 200 205

Pro Pro Leu Pro Trp Arg Asn Gln Thr Ala Ala Arg Thr Ala Pro Lys  
210 215 220

Ser Leu Pro Arg Val Gln Ala Val Phe Arg Ser Asn Leu Ser His Leu  
225 230 235 240

Leu Glu Leu Met Gly Ser Gly Lys Glu Ser Leu Ile Phe Met Lys Lys  
245 250 255

Arg Thr Arg Arg Phe Thr Ala Gln Trp Thr Lys Ala Ala Lys Tyr Leu  
260 265 270

Ala Gln Lys Leu Gly Asp Ile Arg Arg Asp Gln Lys Gln Ile Leu Val  
275 280 285

His Ile Gly Phe Leu Thr Glu Glu Ser Gly Asp Val Phe Ser Pro Arg  
290 295 300

Val Leu Lys Gly Gly Pro Leu Gly Glu Met Val Gln Trp Ala Asp Ile  
305 310 315 320

Leu Ala Ala Leu Tyr Val Leu Gly His Ser Leu Arg Ile Thr Val Ser  
325 330 335

Leu Lys Glu Leu Gln Ser Asn Leu Gly Val Pro Pro Gly Arg Gly Asn  
340 345 350

Cys Pro Leu Thr Val Pro Leu Pro Phe Asp Leu Ile Tyr Thr Asp Tyr  
355 360 365

His Gly Leu Gln Gln Met Lys Gln His Met Gly Leu Ser Phe Lys Lys  
370 375 380

Tyr Arg Cys Arg Ile Arg Val Ile Asp Thr Phe Gly Thr Glu Pro Ala  
385 390 395 400

Tyr Asn His Glu Glu Tyr Ala Thr Leu His Gly Tyr Arg Thr Asn Trp  
405 410 415

Gly Tyr Trp Asn Leu Asn Pro Lys Gln Phe Met Thr Met Phe Pro His

URO-B-0001 PCT1 listage sequence DEPOT  
420 425 430

Thr Pro Asp Asn Ser Phe Met Gly Phe Val Ser Glu Glu Leu Asn Glu  
435 440 445

Thr Glu Lys Gln Leu Ile Lys Asp Gly Lys Ala Ser Asn Met Ala Val  
450 455 460

Val Tyr Gly Lys Glu Ala Ser Ile Trp Lys Leu Gln Gly Lys Glu Lys  
465 470 475 480

Phe Leu Ala Val Leu Asn Lys Tyr Met Glu Ile His Gly Thr Val Tyr  
485 490 495

Tyr Glu Ser Gln Arg Pro Pro Glu Val Pro Ala Phe Val Lys Asn His  
500 505 510

Gly Leu Leu Pro Gln Pro Glu Phe Gln Gln Leu Leu Arg Lys Ala Lys  
515 520 525

Leu Phe Ile Gly Phe Gly Phe Pro Tyr Glu Gly Pro Ala Pro Leu Glu  
530 535 540

Ala Ile Ala Asn Gly Cys Ile Phe Leu Gln Ser Arg Phe Ser Pro Pro  
545 550 555 560

His Ser Ser Leu Asn His Glu Phe Phe Arg Gly Lys Pro Thr Ser Arg  
565 570 575

Glu Val Phe Ser Gln His Pro Tyr Ala Glu Asn Phe Ile Gly Lys Pro  
580 585 590

His Val Trp Thr Val Asp Tyr Asn Asn Ser Asp Glu Phe Glu Thr Ala  
595 600 605

Ile Lys Ala Ile Met Asn Thr Gln Val Asp Pro Tyr Leu Pro Tyr Glu  
610 615 620

Tyr Thr Cys Ala Gly Met Leu Glu Arg Ile Asn Ala Tyr Ile Gln His  
625 630 635 640

Gln Asp Phe Cys Val Gly Pro Ser Pro Leu Pro Pro Gly Ala Ser Thr  
645 650 655

Ala Gln Ser Pro Phe Val Leu Ala Pro Asn Ala Thr His Leu Glu Trp  
660 665 670

Ala Gln Asn Ile Ser Ser Val Pro Gly Ala Trp Pro Pro Thr His Ser  
675 680 685

Leu Arg Ala Trp Leu Ala Ala Pro Gly Arg Ala Cys Thr Asp Ala Cys

690

## URO-B-0001 PCT1 listage sequence DEPOT

695

700

Leu Asp His Gly Leu Ile Cys Glu Pro Ser Phe Phe Pro Phe Leu Asn  
705 710 715 720

Ser Gln Asn Ser Phe Leu Lys Leu Gln Val Pro Cys Asp Ser Thr Glu  
725 730 735

Trp Glu Met His His Leu Tyr Pro Ala Phe Ala Gln Pro Gly Gln Glu  
740 745 750

Cys Tyr Leu Gln Lys Glu Pro Leu Leu Phe Ser Cys Ala Gly Ala Ser  
755 760 765

Thr Lys Tyr Gln Arg Leu Cys Pro Cys Arg Asp Phe Arg Lys Gly Gln  
770 775 780

Val Ala Leu Cys Gln Gly Cys Leu  
785 790

<210> 28  
<211> 741  
<212> PRT  
<213> Homo sapiens

<400> 28

Met Ala Leu Phe Thr Pro Trp Lys Leu Ser Ser Gln Lys Leu Gly Phe  
1 5 10 15

Phe Leu Val Thr Phe Gly Phe Ile Trp Gly Met Met Leu Leu His Phe  
20 25 30

Thr Ile Gln Gln Arg Thr Gln Pro Glu Ser Ser Ser Met Leu Arg Glu  
35 40 45

Gln Ile Leu Asp Leu Ser Lys Arg Tyr Ile Lys Ala Leu Ala Glu Glu  
50 55 60

Asn Arg Asn Val Val Asp Gly Pro Tyr Ala Gly Val Met Thr Ala Tyr  
65 70 75 80

Asp Leu Lys Lys Thr Leu Ala Val Leu Leu Asp Asn Ile Leu Gln Arg  
85 90 95

Ile Gly Lys Leu Glu Ser Lys Val Asp Asn Leu Val Val Asn Gly Thr  
100 105 110

Gly Thr Asn Ser Thr Asn Ser Thr Thr Ala Val Pro Ser Leu Val Ala  
115 120 125

Leu Glu Lys Ile Asn Val Ala Asp Ile Ile Asn Gly Ala Gln Glu Lys  
130 135 140

URO-B-0001 PCT1 listage sequence DEPOT

Cys Val Leu Pro Pro Met Asp Gly Tyr Pro His Cys Glu Gly Lys Ile  
 145 150 155 160  
 Lys Trp Met Lys Asp Met Trp Arg Ser Asp Pro Cys Tyr Ala Asp Tyr  
 165 170 175  
 Gly Val Asp Gly Ser Thr Cys Ser Phe Phe Ile Tyr Leu Ser Glu Val  
 180 185 190  
 Glu Asn Trp Cys Pro His Leu Pro Trp Arg Ala Lys Asn Pro Tyr Glu  
 195 200 205  
 Glu Ala Asp His Asn Ser Leu Ala Glu Ile Arg Thr Asp Phe Asn Ile  
 210 215 220  
 Leu Tyr Ser Met Met Lys Lys His Glu Glu Phe Arg Trp Met Arg Leu  
 225 230 235 240  
 Arg Ile Arg Arg Met Ala Asp Ala Trp Ile Gln Ala Ile Lys Ser Leu  
 245 250 255  
 Ala Glu Lys Gln Asn Leu Glu Lys Arg Lys Arg Lys Lys Val Leu Val  
 260 265 270  
 His Leu Gly Leu Leu Thr Lys Glu Ser Gly Phe Lys Ile Ala Glu Thr  
 275 280 285  
 Ala Phe Ser Gly Gly Pro Leu Gly Glu Leu Val Gln Trp Ser Asp Leu  
 290 295 300  
 Ile Thr Ser Leu Tyr Leu Leu Gly His Asp Ile Arg Ile Ser Ala Ser  
 305 310 315 320  
 Leu Ala Glu Leu Lys Glu Ile Met Lys Lys Val Val Gly Asn Arg Ser  
 325 330 335  
 Gly Cys Pro Thr Val Gly Asp Arg Ile Val Glu Leu Ile Tyr Ile Asp  
 340 345 350  
 Ile Val Gly Leu Ala Gln Phe Lys Lys Thr Leu Gly Pro Ser Trp Val  
 355 360 365  
 His Tyr Gln Cys Met Leu Arg Val Leu Asp Ser Phe Gly Thr Glu Pro  
 370 375 380  
 Glu Phe Asn His Ala Asn Tyr Ala Gln Ser Lys Gly His Lys Thr Pro  
 385 390 395 400  
 Trp Gly Lys Trp Asn Leu Asn Pro Gln Gln Phe Tyr Thr Met Phe Pro  
 405 410 415

URO-B-0001 PCT1 listage sequence DEPOT

His Thr Pro Asp Asn Ser Phe Leu Gly Phe Val Val Glu Gln His Leu  
                   420                  425                  430  
 Asn Ser Ser Asp Ile His His Ile Asn Glu Ile Lys Arg Gln Asn Gln  
                   435                  440                  445  
 Ser Leu Val Tyr Gly Lys Val Asp Ser Phe Trp Lys Asn Lys Lys Ile  
           450                  455                  460  
 Tyr Leu Asp Ile Ile His Thr Tyr Met Glu Val His Ala Thr Val Tyr  
   465                  470                  475                  480  
 Gly Ser Ser Thr Lys Asn Ile Pro Ser Tyr Val Lys Asn His Gly Ile  
                   485                  490                  495  
 Leu Ser Gly Arg Asp Leu Gln Phe Leu Leu Arg Glu Thr Lys Leu Phe  
                   500                  505                  510  
 Val Gly Leu Gly Phe Pro Tyr Glu Gly Pro Ala Pro Leu Glu Ala Ile  
           515                  520                  525  
 Ala Asn Gly Cys Ala Phe Leu Asn Pro Lys Phe Asn Pro Pro Lys Ser  
           530                  535                  540  
 Ser Lys Asn Thr Asp Phe Phe Ile Gly Lys Pro Thr Leu Arg Glu Leu  
   545                  550                  555                  560  
 Thr Ser Gln His Pro Tyr Ala Glu Val Phe Ile Gly Arg Pro His Val  
                   565                  570                  575  
 Trp Thr Val Asp Leu Asn Asn Gln Glu Glu Val Glu Asp Ala Val Lys  
                   580                  585                  590  
 Ala Ile Leu Asn Gln Lys Ile Glu Pro Tyr Met Pro Tyr Glu Phe Thr  
           595                  600                  605  
 Cys Glu Gly Met Leu Gln Arg Ile Asn Ala Phe Ile Glu Lys Gln Asp  
   610                  615                  620  
 Phe Cys His Gly Gln Val Met Trp Pro Pro Leu Ser Ala Leu Gln Val  
   625                  630                  635                  640  
 Lys Leu Ala Glu Pro Gly Gln Ser Cys Lys Gln Val Cys Gln Glu Ser  
           645                  650                  655  
 Gln Leu Ile Cys Glu Pro Ser Phe Phe Gln His Leu Asn Lys Asp Lys  
           660                  665                  670  
 Asp Met Leu Lys Tyr Lys Val Thr Cys Gln Ser Ser Glu Leu Ala Lys  
           675                  680                  685

URO-B-0001 PCT1 listage sequence DEPOT

Asp Ile Leu Val Pro Ser Phe Asp Pro Lys Asn Lys His Cys Val Phe  
690 695 700

Gln Gly Asp Leu Leu Leu Phe Ser Cys Ala Gly Ala His Pro Arg His  
705 710 715 720

Gln Arg Val Cys Pro Cys Arg Asp Phe Ile Lys Gly Gln Val Ala Leu  
725 730 735

Cys Lys Asp Cys Leu  
740

<210> 29  
<211> 790  
<212> PRT  
<213> Homo sapiens

<400> 29

Met Ile Thr Val Asn Pro Asp Gly Lys Ile Met Val Arg Arg Cys Leu  
1 5 10 15

Val Thr Leu Arg Pro Phe Arg Leu Phe Val Leu Gly Ile Gly Phe Phe  
20 25 30

Thr Leu Cys Phe Leu Met Thr Ser Leu Gly Gly Gln Phe Ser Ala Arg  
35 40 45

Arg Leu Gly Asp Ser Pro Phe Thr Ile Arg Thr Glu Val Met Gly Gly  
50 55 60

Pro Glu Ser Arg Gly Val Leu Arg Lys Met Ser Asp Leu Leu Glu Leu  
65 70 75 80

Met Val Lys Arg Met Asp Ala Leu Ala Arg Leu Glu Asn Ser Ser Glu  
85 90 95

Leu His Arg Ala Gly Gly Asp Leu His Phe Pro Ala Asp Arg Met Pro  
100 105 110

Pro Gly Ala Gly Leu Met Glu Arg Ile Gln Ala Ile Ala Gln Asn Val  
115 120 125

Ser Asp Ile Ala Val Lys Val Asp Gln Ile Leu Arg His Ser Leu Leu  
130 135 140

Leu His Ser Lys Val Ser Glu Gly Arg Arg Asp Gln Cys Glu Ala Pro  
145 150 155 160

Ser Asp Pro Lys Phe Pro Asp Cys Ser Gly Lys Val Glu Trp Met Arg  
165 170 175

URO-B-0001 PCT1 listage sequence DEPOT

Ala Arg Trp Thr Ser Asp Pro Cys Tyr Ala Phe Phe Gly Val Asp Gly  
180 185 190

Thr Glu Cys Ser Phe Leu Ile Tyr Leu Ser Glu Val Glu Trp Phe Cys  
195 200 205

Pro Pro Leu Pro Trp Arg Asn Gln Thr Ala Ala Gln Arg Ala Pro Lys  
210 215 220

Pro Leu Pro Lys Val Gln Ala Val Phe Arg Ser Asn Leu Ser His Leu  
225 230 235 240

Leu Asp Leu Met Gly Ser Gly Lys Glu Ser Leu Ile Phe Met Lys Lys  
245 250 255

Arg Thr Lys Arg Leu Thr Ala Gln Trp Ala Leu Ala Ala Gln Arg Leu  
260 265 270

Ala Gln Lys Leu Gly Ala Thr Gln Arg Asp Gln Lys Gln Ile Leu Val  
275 280 285

His Ile Gly Phe Leu Thr Glu Glu Ser Gly Asp Val Phe Ser Pro Arg  
290 295 300

Val Leu Lys Gly Gly Pro Leu Gly Glu Met Val Gln Trp Ala Asp Ile  
305 310 315 320

Leu Thr Ala Leu Tyr Val Leu Gly His Gly Leu Arg Val Thr Val Ser  
325 330 335

Leu Lys Glu Leu Gln Ser Asn Leu Gly Val Pro Pro Gly Arg Gly Ser  
340 345 350

Cys Pro Leu Thr Met Pro Leu Pro Phe Asp Leu Ile Tyr Thr Asp Tyr  
355 360 365

His Gly Leu Gln Gln Met Lys Arg His Met Gly Leu Ser Phe Lys Lys  
370 375 380

Tyr Arg Cys Arg Ile Arg Val Ile Asp Thr Phe Gly Thr Glu Pro Ala  
385 390 395 400

Tyr Asn His Glu Glu Tyr Ala Thr Leu His Gly Tyr Arg Thr Asn Trp  
405 410 415

Gly Tyr Trp Asn Leu Asn Pro Lys Gln Phe Met Thr Met Phe Pro His  
420 425 430

Thr Pro Asp Asn Ser Phe Met Gly Phe Val Ser Glu Glu Leu Asn Glu  
435 440 445

URO-B-0001 PCT1 listage sequence DEPOT

Thr Glu Lys Arg Leu Ile Lys Gly Gly Lys Ala Ser Asn Met Ala Val  
450 455 460

Val Tyr Gly Lys Glu Ala Ser Ile Trp Lys Gly Lys Glu Lys Phe Leu  
465 470 475 480

Gly Ile Leu Asn Lys Tyr Met Glu Ile His Gly Thr Val Tyr Tyr Glu  
485 490 495

Ser Gln Arg Pro Pro Glu Val Pro Ala Phe Val Lys Asn His Gly Leu  
500 505 510

Leu Pro Gln Pro Glu Phe Gln Gln Leu Leu Arg Lys Ala Lys Leu Phe  
515 520 525

Ile Gly Phe Gly Phe Pro Tyr Glu Gly Pro Ala Pro Leu Glu Ala Ile  
530 535 540

Ala Asn Gly Cys Ile Phe Leu Gln Ser Arg Phe Ser Pro Pro His Ser  
545 550 555 560

Ser Leu Asn His Glu Phe Phe Arg Gly Lys Pro Thr Ser Arg Glu Val  
565 570 575

Phe Ser Gln His Pro Tyr Ala Glu Asn Phe Ile Gly Lys Pro His Val  
580 585 590

Trp Thr Val Asp Tyr Asn Asn Ser Glu Glu Phe Glu Ala Ala Ile Lys  
595 600 605

Ala Ile Met Arg Thr Gln Val Asp Pro Tyr Leu Pro Tyr Glu Tyr Thr  
610 615 620

Cys Glu Gly Met Leu Glu Arg Ile His Ala Tyr Ile Gln His Gln Asp  
625 630 635 640

Phe Cys Arg Ala Pro Asp Pro Ala Leu Pro Glu Ala His Ala Pro Gln  
645 650 655

Ser Pro Phe Val Leu Ala Pro Asn Ala Thr His Leu Glu Trp Ala Arg  
660 665 670

Asn Thr Ser Leu Ala Pro Gly Ala Trp Pro Pro Ala His Ala Leu Arg  
675 680 685

Ala Trp Leu Ala Val Pro Gly Arg Ala Cys Thr Asp Thr Cys Leu Asp  
690 695 700

His Gly Leu Ile Cys Glu Pro Ser Phe Phe Pro Phe Leu Asn Ser Gln  
705 710 715 720



URO-B-0001 PCT1 listage sequence DEPOT

Asp Ala Phe Leu Lys<sub>725</sub> Leu Gln Val Pro Cys<sub>730</sub> Asp Ser Thr Glu Ser<sub>735</sub> Glu

Met Asn His Leu<sub>740</sub> Tyr Pro Ala Phe<sub>745</sub> Ala Gln Pro Gly Gln Glu<sub>750</sub> Cys Tyr

Leu Gln Lys<sub>755</sub> Glu Pro Leu Leu Phe<sub>760</sub> Ser Cys Ala Gly Ser<sub>765</sub> Asn Thr Lys

Tyr Arg Arg Leu Cys Pro Cys<sub>775</sub> Arg Asp Phe Arg Lys<sub>780</sub> Gly Gln Val Ala

Leu Cys Gln Gly Cys Leu<sub>790</sub>  
785

<210> 30  
<211> 801  
<212> PRT  
<213> Homo sapiens  
<400> 30

Met His Ser Phe Val<sub>5</sub> Lys His Leu Cys Ser<sub>10</sub> Arg Tyr Val Val Glu Arg<sub>15</sub>  
1

Gln Gly Thr Met<sub>20</sub> Ala Leu Pro Ala Leu<sub>25</sub> Leu Thr Arg Leu Leu<sub>30</sub> Pro Leu

Arg Arg Leu<sub>35</sub> Phe Val Leu Gly Ile<sub>40</sub> Gly Phe Phe Thr Leu<sub>45</sub> Cys Phe Leu

Met Thr Ser Leu Gly Gly Gln<sub>55</sub> Phe Ser Ala Arg Arg<sub>60</sub> Leu Gly Asp Ser  
50

Pro Phe Thr Ile Arg Thr<sub>70</sub> Glu Val Met Gly Gly<sub>75</sub> Pro Glu Ser Arg Gly<sub>80</sub>  
65

Val Leu Arg Lys<sub>85</sub> Met Ser Asp Leu Leu Glu<sub>90</sub> Leu Met Val Lys Arg<sub>95</sub> Met

Asp Ala Leu Ala<sub>100</sub> Arg Leu Glu Asn Ser<sub>105</sub> Ser Glu Leu His Arg<sub>110</sub> Ala Gly

Gly Asp Leu<sub>115</sub> His Phe Pro Ala Asp<sub>120</sub> Arg Met Pro Pro Gly<sub>125</sub> Ala Gly Leu

Met Glu Arg Ile Gln Ala Ile<sub>135</sub> Ala Gln Asn Val Ser<sub>140</sub> Asp Ile Ala Val  
130

Lys Val Asp Gln Ile Leu<sub>150</sub> Arg His Ser Leu Leu<sub>155</sub> Leu His Ser Lys Val<sub>160</sub>  
145

URO-B-0001 PCT1 listage sequence DEPOT

Ser Glu Gly Arg Arg Asp Gln Cys Glu Ala Pro Ser Asp Pro Lys Phe  
165 170 175

Pro Asp Cys Ser Gly Lys Val Glu Trp Met Arg Ala Arg Trp Thr Ser  
180 185 190

Asp Pro Cys Tyr Ala Phe Phe Gly Val Asp Gly Thr Glu Cys Ser Phe  
195 200 205

Leu Ile Tyr Leu Ser Glu Val Glu Trp Phe Cys Pro Pro Leu Pro Trp  
210 215 220

Arg Asn Gln Thr Ala Ala Gln Arg Ala Pro Lys Pro Leu Pro Lys Val  
225 230 235 240

Gln Ala Val Phe Arg Ser Asn Leu Ser His Leu Leu Asp Leu Met Gly  
245 250 255

Ser Gly Lys Glu Ser Leu Ile Phe Met Lys Lys Arg Thr Lys Arg Leu  
260 265 270

Thr Ala Gln Trp Ala Leu Ala Ala Gln Arg Leu Ala Gln Lys Leu Gly  
275 280 285

Ala Thr Gln Arg Asp Gln Lys Gln Ile Leu Val His Ile Gly Phe Leu  
290 295 300

Thr Glu Glu Ser Gly Asp Val Phe Ser Pro Arg Val Leu Lys Gly Gly  
305 310 315 320

Pro Leu Gly Glu Met Val Gln Trp Ala Asp Ile Leu Thr Ala Leu Tyr  
325 330 335

Val Leu Gly His Gly Leu Arg Val Thr Val Ser Leu Lys Glu Leu Gln  
340 345 350

Ser Asn Leu Gly Val Pro Pro Gly Arg Gly Ser Cys Pro Leu Thr Met  
355 360 365

Pro Leu Pro Phe Asp Leu Ile Tyr Thr Asp Tyr His Gly Leu Gln Gln  
370 375 380

Met Lys Arg His Met Gly Leu Ser Phe Lys Lys Tyr Arg Cys Arg Ile  
385 390 395 400

Arg Val Ile Asp Thr Phe Gly Thr Glu Pro Ala Tyr Asn His Glu Glu  
405 410 415

Tyr Ala Thr Leu His Gly Tyr Arg Thr Asn Trp Gly Tyr Trp Asn Leu  
420 425 430

URO-B-0001 PCT1 listage sequence DEPOT

Asn	Pro	Lys	Gln	Phe	Met	Thr	Met	Phe	Pro	His	Thr	Pro	Asp	Asn	Ser
		435					440						445		
Phe	Met	Gly	Phe	Val	Ser	Glu	Glu	Leu	Asn	Glu	Thr	Glu	Lys	Arg	Leu
	450					455					460				
Ile	Lys	Gly	Gly	Lys	Ala	Ser	Asn	Met	Ala	Val	Val	Tyr	Gly	Lys	Glu
465					470					475					480
Ala	Ser	Ile	Trp	Lys	Gly	Lys	Glu	Lys	Phe	Leu	Gly	Ile	Leu	Asn	Lys
				485					490					495	
Tyr	Met	Glu	Ile	His	Gly	Thr	Val	Tyr	Tyr	Glu	Ser	Gln	Arg	Pro	Pro
			500					505					510		
Glu	Val	Pro	Ala	Phe	Val	Lys	Asn	His	Gly	Leu	Leu	Pro	Gln	Pro	Glu
		515					520					525			
Phe	Gln	Gln	Leu	Leu	Arg	Lys	Ala	Lys	Leu	Phe	Ile	Gly	Phe	Gly	Phe
	530					535					540				
Pro	Tyr	Glu	Gly	Pro	Ala	Pro	Leu	Glu	Ala	Ile	Ala	Asn	Gly	Cys	Ile
545					550					555					560
Phe	Leu	Gln	Ser	Arg	Phe	Ser	Pro	Pro	His	Ser	Ser	Leu	Asn	His	Glu
				565					570					575	
Phe	Phe	Arg	Gly	Lys	Pro	Thr	Ser	Arg	Glu	Val	Phe	Ser	Gln	His	Pro
			580					585					590		
Tyr	Ala	Glu	Asn	Phe	Ile	Gly	Lys	Pro	His	Val	Trp	Thr	Val	Asp	Tyr
		595					600					605			
Asn	Asn	Ser	Glu	Glu	Phe	Glu	Ala	Ala	Ile	Lys	Ala	Ile	Met	Arg	Thr
	610					615					620				
Gln	Val	Asp	Pro	Tyr	Leu	Pro	Tyr	Glu	Tyr	Thr	Cys	Glu	Gly	Met	Leu
625					630					635					640
Glu	Arg	Ile	His	Ala	Tyr	Ile	Gln	His	Gln	Asp	Phe	Cys	Arg	Ala	Pro
				645					650					655	
Asp	Pro	Ala	Leu	Pro	Glu	Ala	His	Ala	Pro	Gln	Ser	Pro	Phe	Val	Leu
			660					665					670		
Ala	Pro	Asn	Ala	Thr	His	Leu	Glu	Trp	Ala	Arg	Asn	Thr	Ser	Leu	Ala
		675					680					685			
Pro	Gly	Ala	Trp	Pro	Pro	Ala	His	Ala	Leu	Arg	Ala	Trp	Leu	Ala	Val
	690					695					700				

URO-B-0001 PCT1 listage sequence DEPOT  
 Pro Gly Arg Ala Cys Thr Asp Thr Cys Leu Asp His Gly Leu Ile Cys  
 705 710 715 720

Glu Pro Ser Phe Phe Pro Phe Leu Asn Ser Gln Asp Ala Phe Leu Lys  
 725 730 735

Leu Gln Val Pro Cys Asp Ser Thr Glu Ser Glu Met Asn His Leu Tyr  
 740 745 750

Pro Ala Phe Ala Gln Pro Gly Gln Glu Cys Tyr Leu Gln Lys Glu Pro  
 755 760 765

Leu Leu Phe Ser Cys Ala Gly Ser Asn Thr Lys Tyr Arg Arg Leu Cys  
 770 775 780

Pro Cys Arg Asp Phe Arg Lys Gly Gln Val Ala Leu Cys Gln Gly Cys  
 785 790 795 800

Leu

<210> 31  
 <211> 464  
 <212> PRT  
 <213> Gallus gallus

<400> 31

Met Arg Cys Ser Pro Lys Arg Ser Leu Thr Ala Val Ile Ala Ala Ser  
 1 5 10 15

Phe Leu Leu Leu Leu Leu Leu Leu Leu His Arg Gly Ser Trp Gln  
 20 25 30

Asp Pro Gln Glu Val Gln Phe Arg Asp Leu Pro Ser Asp Ala Val Leu  
 35 40 45

Lys Ile Leu Lys Gln Gly Ser Leu His Ile Leu Gln Asp Thr Asp Asn  
 50 55 60

Leu Cys Ala Leu His Asn Ile Ser Tyr His Leu Leu Ala Gly Ser Pro  
 65 70 75 80

Leu Pro His Lys Lys Phe Leu Ala Val Gly Leu Ser Ser Val Arg Arg  
 85 90 95

Pro Arg Gly Tyr Tyr Leu Pro Asp Thr Leu Gln Ser Leu Phe Lys Gln  
 100 105 110

Ser Ser Glu Glu Glu Leu Gln Glu Met Val Val Val Val His Leu Ala  
 115 120 125

Asp Ala Asp Pro Ile Trp Asn Ala Gln Val Ala Ala Asp Ile Ser His

URO-B-0001 PCT1 listage sequence DEPOT

130

135

140

Arg Phe Ala His His Ile Leu Leu Gly Arg Leu Val Leu Ile His Thr  
145 150 155 160

Pro His Glu Phe Tyr Pro Thr Leu Glu Gly Leu Lys Arg Asn Tyr Asn  
165 170 175

Asp Pro Glu Glu Arg Val Lys Phe Arg Ser Lys Gln Asn Val Asp Tyr  
180 185 190

Ala Phe Leu Phe Thr Phe Ala Ala Asn Leu Ser Ser Tyr Tyr Leu Met  
195 200 205

Ile Glu Asp Asp Val Trp Ser Ala Lys Ser Phe Phe Thr Ala Ile Arg  
210 215 220

Lys Ala Val Ala Ser Gln Glu Gly Ser Asn Trp Ala Thr Leu Glu Phe  
225 230 235 240

Ser Lys Leu Gly Tyr Ile Gly Lys Leu Tyr Arg Ser Ser Asp Leu Pro  
245 250 255

Arg Leu Ala Arg Phe Leu Leu Leu Phe Tyr Gln Glu Met Pro Cys Asp  
260 265 270

Trp Leu Leu Thr His Phe Arg Leu Leu Leu Thr Gln Lys Asp Val Ile  
275 280 285

Arg Phe Lys Pro Ser Leu Phe Gln His Met Gly Leu Tyr Ser Ser Phe  
290 295 300

Gln Gly Thr Val Asn Arg Leu Glu Asp Asp Glu Phe Gln Ala Asp Ala  
305 310 315 320

Met Asp Leu Pro Asp Asn Pro Pro Ala Ala Leu Phe Thr Asn Met Val  
325 330 335

Val Phe Glu Asn Tyr Glu Pro Ser Lys Ala Tyr Ser Thr Ala Arg Gly  
340 345 350

Tyr Phe Trp Gly Lys Asn Pro Ala Val Gly Ser Ile Phe Ser Ile Val  
355 360 365

Phe His Gln Pro Ala Arg Val Thr Arg Val Arg Val Gln Thr Gly Ser  
370 375 380

Ser Glu Arg Pro Gly Asp Phe Leu His Ala Gly Val Leu Glu Leu Gly  
385 390 395 400

Arg Gly Arg Arg Ala Asp Gly Arg Asp Cys Ser Val Tyr Thr Thr Val

URO-B-0001 PCT1 listage sequence DEPOT  
405 410 415

Gly Thr Phe Glu Lys Gly Asn Leu Glu Trp Arg Gly Leu Glu Lys Gly  
420 425 430

Met Pro Asn Pro Val Glu Cys Val Arg Ile Arg Val Thr Gln Ser Gln  
435 440 445

Ser Glu Trp Leu Ile Ile Gln Ser Ile Gly Ile Trp Thr Ala Gly Thr  
450 455 460

<210> 32  
<211> 575  
<212> PRT  
<213> Mus musculus  
  
<400> 32

Met Arg Ala Trp Thr Gly Ser Trp Arg Trp Ile Met Leu Ile Leu Phe  
1 5 10 15

Ala Trp Gly Thr Leu Leu Phe Tyr Ile Gly Gly His Leu Val Arg Asp  
20 25 30

Asn Asp His Pro Asp His Ser Ser Arg Glu Leu Ser Lys Ile Leu Ala  
35 40 45

Lys Leu Glu Arg Leu Lys Gln Gln Asn Glu Asp Leu Arg Arg Met Ala  
50 55 60

Glu Ser Leu Arg Ile Pro Glu Gly Pro Ile Asp Gln Gly Thr Ala Thr  
65 70 75 80

Gly Arg Val Arg Val Leu Glu Glu Gln Leu Val Lys Ala Lys Glu Gln  
85 90 95

Ile Glu Asn Tyr Lys Lys Gln Ala Arg Asn Gly Leu Gly Lys Asp His  
100 105 110

Glu Ile Leu Arg Arg Arg Ile Glu Asn Gly Ala Lys Glu Leu Trp Phe  
115 120 125

Phe Leu Gln Ser Glu Leu Lys Lys Leu Lys His Leu Glu Gly Asn Glu  
130 135 140

Leu Gln Arg His Ala Asp Glu Ile Leu Leu Asp Leu Gly His His Glu  
145 150 155 160

Arg Ser Ile Met Thr Asp Leu Tyr Tyr Leu Ser Gln Thr Asp Gly Ala  
165 170 175

Gly Asp Trp Arg Glu Lys Glu Ala Lys Asp Leu Thr Glu Leu Val Gln  
180 185 190

URO-B-0001 PCT1 listage sequence DEPOT

Arg Arg Ile Thr Tyr Leu Gln Asn Pro Lys Asp Cys Ser Lys Ala Arg  
195 200 205

Lys Leu Val Cys Asn Ile Asn Lys Gly Cys Gly Tyr Gly Cys Gln Leu  
210 215 220

His His Val Val Tyr Cys Phe Met Ile Ala Tyr Gly Thr Gln Arg Thr  
225 230 235 240

Leu Ile Leu Glu Ser Gln Asn Trp Arg Tyr Ala Thr Gly Gly Trp Glu  
245 250 255

Thr Val Phe Arg Pro Val Ser Glu Thr Cys Thr Asp Arg Ser Gly Leu  
260 265 270

Ser Thr Gly His Trp Ser Gly Glu Val Asn Asp Lys Asn Ile Gln Val  
275 280 285

Val Glu Leu Pro Ile Val Asp Ser Leu His Pro Arg Pro Pro Tyr Leu  
290 295 300

Pro Leu Ala Val Pro Glu Asp Leu Ala Asp Arg Leu Leu Arg Val His  
305 310 315 320

Gly Asp Pro Ala Val Trp Trp Val Ser Gln Phe Val Lys Tyr Leu Ile  
325 330 335

Arg Pro Gln Pro Trp Leu Glu Lys Glu Ile Glu Glu Ala Thr Lys Lys  
340 345 350

Leu Gly Phe Lys His Pro Val Ile Gly Val His Val Arg Arg Thr Asp  
355 360 365

Lys Val Gly Thr Glu Ala Ala Phe His Pro Ile Glu Glu Tyr Met Val  
370 375 380

His Val Glu Glu His Phe Gln Leu Leu Ala Arg Arg Met Gln Val Asp  
385 390 395 400

Lys Lys Arg Val Tyr Leu Ala Thr Asp Asp Pro Thr Leu Leu Lys Glu  
405 410 415

Ala Lys Thr Lys Tyr Ser Asn Tyr Glu Phe Ile Ser Asp Asn Ser Ile  
420 425 430

Ser Trp Ser Ala Gly Leu His Asn Arg Tyr Thr Glu Asn Ser Leu Arg  
435 440 445

Gly Val Ile Leu Asp Ile His Phe Leu Ser Gln Ala Asp Phe Leu Val  
450 455 460

URO-B-0001 PCT1 listage sequence DEPOT

Cys Thr Phe Ser Ser Gln Val Cys Arg Val Ala Tyr Glu Ile Met Gln  
 465 470 475 480  
 Thr Leu His Pro Asp Ala Ser Ala Asn Phe His Ser Leu Asp Asp Ile  
 485 490 495  
 Tyr Tyr Phe Gly Gly Gln Asn Ala His Asn Gln Ile Ala Val Tyr Pro  
 500 505 510  
 His Lys Pro Arg Thr Glu Glu Glu Ile Pro Met Glu Pro Gly Asp Ile  
 515 520 525  
 Ile Gly Val Ala Gly Asn His Trp Asp Gly Tyr Ser Lys Gly Ile Asn  
 530 535 540  
 Arg Lys Leu Gly Lys Thr Gly Leu Tyr Pro Ser Tyr Lys Val Arg Glu  
 545 550 555 560  
 Lys Ile Glu Thr Val Lys Tyr Pro Thr Tyr Pro Glu Ala Glu Lys  
 565 570 575  
 <210> 33  
 <211> 575  
 <212> PRT  
 <213> Homo sapiens  
 <400> 33  
 Met Arg Pro Trp Thr Gly Ser Trp Arg Trp Ile Met Leu Ile Leu Phe  
 1 5 10 15  
 Ala Trp Gly Thr Leu Leu Phe Tyr Ile Gly Gly His Leu Val Arg Asp  
 20 25 30  
 Asn Asp His Pro Asp His Ser Ser Arg Glu Leu Ser Lys Ile Leu Ala  
 35 40 45  
 Lys Leu Glu Arg Leu Lys Gln Gln Asn Glu Asp Leu Arg Arg Met Ala  
 50 55 60  
 Glu Ser Leu Arg Ile Pro Glu Gly Pro Ile Asp Gln Gly Pro Ala Ile  
 65 70 75 80  
 Gly Arg Val Arg Val Leu Glu Glu Gln Leu Val Lys Ala Lys Glu Gln  
 85 90 95  
 Ile Glu Asn Tyr Lys Lys Gln Thr Arg Asn Gly Leu Gly Lys Asp His  
 100 105 110  
 Glu Ile Leu Arg Arg Arg Ile Glu Asn Gly Ala Lys Glu Leu Trp Phe  
 115 120 125



URO-B-0001 PCT1 listage sequence DEPOT

Phe Leu Gln Ser Glu Leu Lys Lys Leu Lys Asn Leu Glu Gly Asn Glu  
 130 135 140  
 Leu Gln Arg His Ala Asp Glu Phe Leu Leu Asp Leu Gly His His Glu  
 145 150 155 160  
 Arg Ser Ile Met Thr Asp Leu Tyr Tyr Leu Ser Gln Thr Asp Gly Ala  
 165 170 175  
 Gly Asp Trp Arg Glu Lys Glu Ala Lys Asp Leu Thr Glu Leu Val Gln  
 180 185 190  
 Arg Arg Ile Thr Tyr Leu Gln Asn Pro Lys Asp Cys Ser Lys Ala Lys  
 195 200 205  
 Lys Leu Val Cys Asn Ile Asn Lys Gly Cys Gly Tyr Gly Cys Gln Leu  
 210 215 220  
 His His Val Val Tyr Cys Phe Met Ile Ala Tyr Gly Thr Gln Arg Thr  
 225 230 235 240  
 Leu Ile Leu Glu Ser Gln Asn Trp Arg Tyr Ala Thr Gly Gly Trp Glu  
 245 250 255  
 Thr Val Phe Arg Pro Val Ser Glu Thr Cys Thr Asp Arg Ser Gly Ile  
 260 265 270  
 Ser Thr Gly His Trp Ser Gly Glu Val Lys Asp Lys Asn Val Gln Val  
 275 280 285  
 Val Glu Leu Pro Ile Val Asp Ser Leu His Pro Arg Pro Pro Tyr Leu  
 290 295 300  
 Pro Leu Ala Val Pro Glu Asp Leu Ala Asp Arg Leu Val Arg Val His  
 305 310 315 320  
 Gly Asp Pro Ala Val Trp Trp Val Ser Gln Phe Val Lys Tyr Leu Ile  
 325 330 335  
 Arg Pro Gln Pro Trp Leu Glu Lys Glu Ile Glu Glu Ala Thr Lys Lys  
 340 345 350  
 Leu Gly Phe Lys His Pro Val Ile Gly Val His Val Arg Arg Thr Asp  
 355 360 365  
 Lys Val Gly Thr Glu Ala Ala Phe His Pro Ile Glu Glu Tyr Met Val  
 370 375 380  
 His Val Glu Glu His Phe Gln Leu Leu Ala Arg Arg Met Gln Val Asp  
 385 390 395 400

URO-B-0001 PCT1 listage sequence DEPOT

Lys Lys Arg Val Tyr Leu Ala Thr Asp Asp Pro Ser Leu Leu Lys Glu  
405 410 415

Ala Lys Thr Lys Tyr Pro Asn Tyr Glu Phe Ile Ser Asp Asn Ser Ile  
420 425 430

Ser Trp Ser Ala Gly Leu His Asn Arg Tyr Thr Glu Asn Ser Leu Arg  
435 440 445

Gly Val Ile Leu Asp Ile His Phe Leu Ser Gln Ala Asp Phe Leu Val  
450 455 460

Cys Thr Phe Ser Ser Gln Val Cys Arg Val Ala Tyr Glu Ile Met Gln  
465 470 475 480

Thr Leu His Pro Asp Ala Ser Ala Asn Phe His Ser Leu Asp Asp Ile  
485 490 495

Tyr Tyr Phe Gly Gly Gln Asn Ala His Asn Gln Ile Ala Ile Tyr Ala  
500 505 510

His Gln Pro Arg Thr Ala Asp Glu Ile Pro Met Glu Pro Gly Asp Ile  
515 520 525

Ile Gly Val Ala Gly Asn His Trp Asp Gly Tyr Ser Lys Gly Val Asn  
530 535 540

Arg Lys Leu Gly Arg Thr Gly Leu Tyr Pro Ser Tyr Lys Val Arg Glu  
545 550 555 560

Lys Ile Glu Thr Val Lys Tyr Pro Thr Tyr Pro Glu Ala Glu Lys  
565 570 575

<210> 34  
<211> 398  
<212> PRT  
<213> Homo sapiens

<400> 34

Met Arg Leu Arg Glu Pro Leu Leu Ser Gly Ser Ala Ala Met Pro Gly  
1 5 10 15

Ala Ser Leu Gln Arg Ala Cys Arg Leu Leu Val Ala Val Cys Ala Leu  
20 25 30

His Leu Gly Val Thr Leu Val Tyr Tyr Leu Ala Gly Arg Asp Leu Ser  
35 40 45

Arg Leu Pro Gln Leu Val Gly Val Ser Thr Pro Leu Gln Gly Gly Ser  
50 55 60

URO-B-0001 PCT1 listage sequence DEPOT

Asn	Ser	Ala	Ala	Ala	Ile	Gly	Gln	Ser	Ser	Gly	Glu	Leu	Arg	Thr	Gly
65					70					75					80
Gly	Ala	Arg	Pro	Pro	Pro	Pro	Leu	Gly	Ala	Ser	Ser	Gln	Pro	Arg	Pro
				85					90					95	
Gly	Gly	Asp	Ser	Ser	Pro	Val	Val	Asp	Ser	Gly	Pro	Gly	Pro	Ala	Ser
			100					105					110		
Asn	Leu	Thr	Ser	Val	Pro	Val	Pro	His	Thr	Thr	Ala	Leu	Ser	Leu	Pro
		115					120					125			
Ala	Cys	Pro	Glu	Glu	Ser	Pro	Leu	Leu	Val	Gly	Pro	Met	Leu	Ile	Glu
	130					135					140				
Phe	Asn	Met	Pro	Val	Asp	Leu	Glu	Leu	Val	Ala	Lys	Gln	Asn	Pro	Asn
145					150					155					160
Val	Lys	Met	Gly	Gly	Arg	Tyr	Ala	Pro	Arg	Asp	Cys	Val	Ser	Pro	His
				165					170					175	
Lys	Val	Ala	Ile	Ile	Ile	Pro	Phe	Arg	Asn	Arg	Gln	Glu	His	Leu	Lys
			180					185					190		
Tyr	Trp	Leu	Tyr	Tyr	Leu	His	Pro	Val	Leu	Gln	Arg	Gln	Gln	Leu	Asp
		195					200					205			
Tyr	Gly	Ile	Tyr	Val	Ile	Asn	Gln	Ala	Gly	Asp	Thr	Ile	Phe	Asn	Arg
	210					215					220				
Ala	Lys	Leu	Leu	Asn	Val	Gly	Phe	Gln	Glu	Ala	Leu	Lys	Asp	Tyr	Asp
225					230					235					240
Tyr	Thr	Cys	Phe	Val	Phe	Ser	Asp	Val	Asp	Leu	Ile	Pro	Met	Asn	Asp
				245					250					255	
His	Asn	Ala	Tyr	Arg	Cys	Phe	Ser	Gln	Pro	Arg	His	Ile	Ser	Val	Ala
			260					265					270		
Met	Asp	Lys	Phe	Gly	Phe	Ser	Leu	Pro	Tyr	Val	Gln	Tyr	Phe	Gly	Gly
		275					280					285			
Val	Ser	Ala	Leu	Ser	Lys	Gln	Gln	Phe	Leu	Thr	Ile	Asn	Gly	Phe	Pro
	290					295					300				
Asn	Asn	Tyr	Trp	Gly	Trp	Gly	Gly	Glu	Asp	Asp	Asp	Ile	Phe	Asn	Arg
305					310					315					320
Leu	Val	Phe	Arg	Gly	Met	Ser	Ile	Ser	Arg	Pro	Asn	Ala	Val	Val	Gly
				325					330					335	

URO-B-0001 PCT1 listage sequence DEPOT

Arg Cys Arg Met Ile Arg Arg His Ser Arg Asp Lys Lys Asn Glu Pro Asn  
340 345 350

Pro Gln Arg Phe Asp Arg Ile Ala His Thr Lys Glu Thr Met Leu Ser  
355 360 365

Asp Gly Leu Asn Ser Leu Thr Tyr Gln Val Leu Asp Val Gln Arg Tyr  
370 375 380

Pro Leu Tyr Thr Gln Ile Thr Val Asp Ile Gly Thr Pro Ser  
385 390 395

<210> 35  
<211> 346  
<212> PRT  
<213> Mus musculus  
  
<400> 35

Met Arg Phe Arg Glu Gln Phe Leu Gly Gly Ser Ala Ala Met Pro Gly  
1 5 10 15

Ala Thr Leu Gln Arg Ala Cys Arg Leu Leu Val Ala Val Cys Ala Leu  
20 25 30

His Leu Gly Val Thr Leu Val Tyr Tyr Leu Ser Gly Arg Asp Leu Ser  
35 40 45

Arg Leu Pro Gln Leu Val Gly Val Ser Ser Thr Leu Gln Gly Gly Thr  
50 55 60

Asn Gly Ala Ala Ala Ser Lys Gln Pro Pro Gly Glu Gln Arg Pro Arg  
65 70 75 80

Gly Ala Arg Pro Pro Pro Pro Leu Gly Val Ser Pro Lys Pro Arg Pro  
85 90 95

Gly Leu Asp Ser Ser Pro Gly Ala Ala Ser Gly Pro Gly Leu Lys Ser  
100 105 110

Asn Leu Ser Ser Leu Pro Val Pro Thr Thr Thr Gly Leu Leu Ser Leu  
115 120 125

Pro Ala Cys Pro Glu Glu Ser Pro Leu Leu Val Gly Pro Met Leu Ile  
130 135 140

Asp Phe Asn Ile Ala Val Asp Leu Glu Leu Leu Ala Lys Lys Asn Pro  
145 150 155 160

Glu Ile Lys Thr Gly Gly Arg Tyr Ser Pro Lys Asp Cys Val Ser Pro  
165 170 175

His Lys Val Ala Ile Ile Ile Pro Phe Arg Asn Arg Gln Glu His Leu

URO-B-0001 PCT1 listage sequence DEPOT

180 185 190

Lys Tyr Trp Leu Tyr Tyr Leu His Pro Ile Leu Gln Arg Gln Gln Leu  
195 200 205

Asp Tyr Gly Ile Tyr Val Ile Asn Gln Ala Gly Asp Thr Met Phe Asn  
210 215 220

Arg Ala Lys Leu Leu Asn Ile Gly Phe Gln Glu Ala Leu Lys Asp Tyr  
225 230 235 240

Asp Tyr Asn Cys Phe Val Phe Ser Asp Val Asp Leu Ile Pro Met Asp  
245 250 255

Asp Arg Asn Ala Tyr Arg Cys Phe Ser Gln Pro Arg His Ile Ser Val  
260 265 270

Ala Met Asp Lys Phe Gly Phe Ser Leu Pro Tyr Val Gln Tyr Phe Gly  
275 280 285

Gly Val Ser Ala Leu Ser Lys Gln Gln Phe Leu Ala Ile Asn Gly Phe  
290 295 300

Pro Asn Asn Tyr Trp Gly Trp Gly Gly Glu Asp Asp Asp Ile Phe Asn  
305 310 315 320

Arg Ser Lys Pro Lys Ala Ser Ala Glu Glu Thr Gly Gly Ser Leu Gly  
325 330 335

Lys Ala Leu Ser Pro Ala Ser Thr Arg Ala  
340 345

<210> 36  
<211> 438  
<212> PRT  
<213> Mus musculus

<400> 36

Met Lys Pro His Leu Lys Gln Trp Arg Gln Arg Met Leu Phe Gly Ile  
1 5 10 15

Phe Val Trp Gly Leu Leu Phe Leu Ala Ile Phe Ile Tyr Phe Thr Asn  
20 25 30

Ser Asn Pro Ala Ala Pro Met Pro Ser Ser Phe Ser Phe Leu Glu Arg  
35 40 45

Arg Gly Leu Leu Pro Leu Gln Gly Lys Gln Arg Val Ile Met Gly Ala  
50 55 60

Leu Gln Glu Pro Ser Leu Pro Arg Ser Leu Asp Ala Ser Lys Val Leu  
65 70 75 80

URO-B-0001 PCT1 listage sequence DEPOT

Leu Asp Ser His Pro Glu Asn Pro Phe His Pro Trp Pro Gly Asp Pro  
 85 90 95  
 Gln Lys Trp Asp Gln Ala Pro Asn Gly Phe Asp Asn Gly Asp Glu Phe  
 100 105 110  
 Phe Thr Ser Gln Val Gly Arg Lys Ser Gln Ser Ala Phe Tyr Pro Glu  
 115 120 125  
 Glu Asp Ser Tyr Phe Phe Val Ala Asp Gln Pro Glu Leu Tyr His His  
 130 135 140  
 Arg Gln Gly Ala Leu Glu Leu Pro Ser Pro Gly Glu Thr Ser Trp Arg  
 145 150 155 160  
 Ser Gly Pro Val Gln Pro Lys Gln Lys Leu Leu His Pro Arg Arg Gly  
 165 170 175  
 Ser Leu Pro Glu Glu Ala Tyr Asp Ser Asp Met Leu Ser Ala Ser Met  
 180 185 190  
 Ser Arg Ala Phe Leu Tyr Arg Leu Trp Lys Gly Ala Val Ser Ser Lys  
 195 200 205  
 Met Leu Asn Pro Arg Leu Gln Lys Ala Met Arg Tyr Tyr Met Ser Phe  
 210 215 220  
 Asn Lys His Gly Val Arg Phe Arg Arg Arg Gly Arg Arg Glu Ala Thr  
 225 230 235 240  
 Arg Thr Gly Pro Glu Leu Leu Cys Glu Met Arg Arg Arg Val Arg Val  
 245 250 255  
 Arg Thr Leu Asp Gly Arg Glu Ala Pro Phe Ser Gly Leu Gly Trp Arg  
 260 265 270  
 Pro Leu Val Pro Gly Val Pro Leu Ser Gln Leu His Pro Arg Gly Leu  
 275 280 285  
 Ser Ser Cys Ala Val Val Met Ser Ala Gly Ala Ile Leu Asn Ser Ser  
 290 295 300  
 Leu Gly Glu Glu Ile Asp Ser His Asp Ala Val Leu Arg Phe Asn Ser  
 305 310 315 320  
 Ala Pro Thr Arg Gly Tyr Glu Lys Asp Val Gly Asn Lys Thr Thr Val  
 325 330 335  
 Arg Ile Ile Asn Ser Gln Ile Leu Ala Asn Pro Ser His His Phe Ile  
 340 345 350

URO-B-0001 PCT1 listage sequence DEPOT

Asp Ser Ala Leu Tyr Lys Asp Val Ile Leu Val Ala Trp Asp Pro Ala  
355 360 365

Pro Tyr Ser Ala Asn Leu Asn Leu Trp Tyr Lys Lys Pro Asp Tyr Asn  
370 375 380

Leu Phe Thr Pro Tyr Ile Gln His Arg Arg Lys Tyr Pro Thr Gln Pro  
385 390 395 400

Phe Tyr Ile Leu His Pro Lys Phe Ile Trp Gln Leu Trp Asp Ile Ile  
405 410 415

Gln Glu Asn Thr Arg Glu Lys Ile Gln Pro Asn Pro Pro Ser Ser Gly  
420 425 430

Phe Ile Gly Thr Cys Val  
435

<210> 37  
<211> 406  
<212> PRT  
<213> Homo sapiens

<400> 37

Met Ile His Thr Asn Leu Lys Lys Lys Phe Ser Cys Cys Val Leu Val  
1 5 10 15

Phe Leu Leu Phe Ala Val Ile Cys Val Trp Lys Glu Lys Lys Lys Gly  
20 25 30

Ser Tyr Tyr Asp Ser Phe Lys Leu Gln Thr Lys Glu Phe Gln Val Leu  
35 40 45

Lys Ser Leu Gly Lys Leu Ala Met Gly Ser Asp Ser Gln Ser Val Ser  
50 55 60

Ser Ser Ser Thr Gln Asp Pro His Arg Gly Arg Gln Thr Leu Gly Ser  
65 70 75 80

Leu Arg Gly Leu Ala Lys Ala Lys Pro Glu Ala Ser Phe Gln Val Trp  
85 90 95

Asn Lys Asp Ser Ser Ser Lys Asn Leu Ile Pro Arg Leu Gln Lys Ile  
100 105 110

Trp Lys Asn Tyr Leu Ser Met Asn Lys Tyr Lys Val Ser Tyr Lys Gly  
115 120 125

Pro Gly Pro Gly Ile Lys Phe Ser Ala Glu Ala Leu Arg Cys His Leu  
130 135 140

URO-B-0001 PCT1 listage sequence DEPOT

Arg Asp His Val Asn Val Ser Met Val Glu Val Thr Asp Phe Pro Phe  
 145 150 155 160  
 Asn Thr Ser Glu Trp Glu Gly Tyr Leu Pro Lys Glu Ser Ile Arg Thr  
 165 170 175  
 Lys Ala Gly Pro Trp Gly Arg Cys Ala Val Val Ser Ser Ala Gly Ser  
 180 185 190  
 Leu Lys Ser Ser Gln Leu Gly Arg Glu Ile Asp Asp His Asp Ala Val  
 195 200 205  
 Leu Arg Phe Asn Gly Ala Pro Thr Ala Asn Phe Gln Gln Asp Val Gly  
 210 215 220  
 Thr Lys Thr Thr Ile Arg Leu Met Asn Ser Gln Leu Val Thr Thr Glu  
 225 230 235 240  
 Lys Arg Phe Leu Lys Asp Ser Leu Tyr Asn Glu Gly Ile Leu Ile Val  
 245 250 255  
 Trp Asp Pro Ser Val Tyr His Ser Asp Ile Pro Lys Trp Tyr Gln Asn  
 260 265 270  
 Pro Asp Tyr Asn Phe Phe Asn Asn Tyr Lys Thr Tyr Arg Lys Leu His  
 275 280 285  
 Pro Asn Gln Pro Phe Tyr Ile Leu Lys Pro Gln Met Pro Trp Glu Leu  
 290 295 300  
 Trp Asp Ile Leu Gln Glu Ile Ser Pro Glu Glu Ile Gln Pro Asn Pro  
 305 310 315 320  
 Pro Ser Ser Gly Met Leu Gly Ile Ile Ile Met Met Thr Leu Cys Asp  
 325 330 335  
 Gln Val Asp Ile Tyr Glu Phe Leu Pro Ser Lys Arg Lys Thr Asp Val  
 340 345 350  
 Cys Tyr Tyr Tyr Gln Lys Phe Phe Asp Ser Ala Cys Thr Met Gly Ala  
 355 360 365  
 Tyr His Pro Leu Leu Tyr Glu Lys Asn Leu Val Lys His Leu Asn Gln  
 370 375 380  
 Gly Thr Asp Glu Asp Ile Tyr Leu Leu Gly Lys Ala Thr Leu Pro Gly  
 385 390 395 400  
 Phe Arg Thr Ile His Cys  
 405



URO-B-0001 PCT1 listage sequence DEPOT

<210> 38  
 <211> 175  
 <212> PRT  
 <213> Homo sapiens

<400> 38

Met Asn Ser Gln Leu Val Thr Thr Glu Lys Arg Phe Leu Lys Asp Ser  
 1 5 10 15

Leu Tyr Asn Glu Gly Ile Leu Ile Val Trp Asp Pro Ser Val Tyr His  
 20 25 30

Ser Asp Ile Pro Lys Trp Tyr Gln Asn Pro Asp Tyr Asn Phe Phe Asn  
 35 40 45

Asn Tyr Lys Thr Tyr Arg Lys Leu His Pro Asn Gln Pro Phe Tyr Ile  
 50 55 60

Leu Lys Pro Gln Met Pro Trp Glu Leu Trp Asp Ile Leu Gln Glu Ile  
 65 70 75 80

Ser Pro Glu Glu Ile Gln Pro Asn Pro Pro Ser Ser Gly Met Leu Gly  
 85 90 95

Ile Ile Ile Met Met Thr Leu Cys Asp Gln Val Asp Ile Tyr Glu Phe  
 100 105 110

Leu Pro Ser Lys Arg Lys Thr Asp Val Cys Tyr Tyr Tyr Gln Lys Phe  
 115 120 125

Phe Asp Ser Ala Cys Thr Met Gly Ala Tyr His Pro Leu Leu Tyr Glu  
 130 135 140

Lys Asn Leu Val Lys His Leu Asn Gln Gly Thr Asp Glu Asp Ile Tyr  
 145 150 155 160

Leu Leu Gly Lys Ala Thr Leu Pro Gly Phe Arg Thr Ile His Cys  
 165 170 175

<210> 39  
 <211> 337  
 <212> PRT  
 <213> Mus musculus

<400> 39

Met Arg Arg Lys Thr Leu Lys Tyr Leu Thr Phe Phe Leu Leu Phe Ile  
 1 5 10 15

Phe Leu Thr Ser Phe Val Leu Asn Tyr Ser Asn Thr Gly Val Pro Ser  
 20 25 30

Ala Trp Phe Pro Lys Gln Met Leu Leu Glu Leu Ser Glu Asn Phe Arg

URO-B-0001 PCT1 listage sequence DEPOT

35

40

45

Arg Phe Ile Lys Ser Gln Pro Cys Thr Cys Arg His Cys Ile Ser Gln  
50 55 60

Asp Lys Val Ser Tyr Trp Phe Asp Gln Arg Phe Asn Lys Thr Met Gln  
65 70 75 80

Pro Leu Leu Thr Val His Asn Ala Leu Met Glu Glu Asp Thr Tyr Arg  
85 90 95

Trp Trp Leu Arg Leu Gln Arg Glu Arg Lys Pro Asn Asn Leu Ser Asp  
100 105 110

Thr Val Lys Glu Leu Phe Arg Leu Val Pro Gly Asn Val Asp Pro Met  
115 120 125

Leu Asn Lys Arg Leu Val Gly Cys Arg Arg Cys Ala Val Val Gly Asn  
130 135 140

Ser Gly Asn Leu Lys Asp Ser Ser Tyr Gly Pro Glu Ile Asp Ser His  
145 150 155 160

Asp Phe Val Leu Arg Met Asn Lys Ala Pro Thr Val Gly Phe Glu Ala  
165 170 175

Asp Val Gly Ser Arg Thr Thr His His Leu Val Tyr Pro Glu Ser Phe  
180 185 190

Arg Glu Leu Gly Glu Asn Val Asn Met Val Leu Val Pro Phe Lys Thr  
195 200 205

Thr Asp Leu Gln Trp Val Ile Ser Ala Thr Thr Thr Gly Thr Ile Thr  
210 215 220

His Thr Tyr Val Pro Val Pro Pro Lys Ile Lys Val Lys Gln Glu Lys  
225 230 235 240

Ile Leu Ile Tyr His Pro Ala Phe Ile Lys Tyr Val Phe Asp Asn Trp  
245 250 255

Leu Gln Gly His Gly Arg Tyr Pro Ser Thr Gly Ile Leu Ser Ile Ile  
260 265 270

Phe Ser Ile His Ile Cys Asp Glu Val Asp Leu Tyr Gly Phe Gly Ala  
275 280 285

Asp Ser Lys Gly Asn Trp His His Tyr Trp Glu Asn Asn Pro Ser Ala  
290 295 300

Gly Ala Phe Arg Lys Thr Gly Val His Asp Gly Asp Phe Glu Tyr Asn

URO-B-0001 PCT1 listage sequence DEPOT  
 305 310 315 320

Ile Thr Thr Thr Leu Ala Ala Ile Asn Lys Ile Arg Ile Phe Lys Gly  
 325 330 335

Arg

<210> 40  
 <211> 340  
 <212> PRT  
 <213> Homo sapiens

<400> 40

Met Val Thr Leu Arg Lys Arg Thr Leu Lys Val Leu Thr Phe Leu Val  
 1 5 10 15

Leu Phe Ile Phe Leu Thr Ser Phe Phe Leu Asn Tyr Ser His Thr Met  
 20 25 30

Val Ala Thr Thr Trp Phe Pro Lys Gln Met Val Leu Glu Leu Ser Glu  
 35 40 45

Asn Leu Lys Arg Leu Ile Lys His Arg Pro Cys Thr Cys Thr His Cys  
 50 55 60

Ile Gly Gln Arg Lys Leu Ser Ala Trp Phe Asp Glu Arg Phe Asn Gln  
 65 70 75 80

Thr Met Gln Pro Leu Leu Thr Ala Gln Asn Ala Leu Leu Glu Asp Asp  
 85 90 95

Thr Tyr Arg Trp Trp Leu Arg Leu Gln Arg Glu Lys Lys Pro Asn Asn  
 100 105 110

Leu Asn Asp Thr Ile Lys Glu Leu Phe Arg Val Val Pro Gly Asn Val  
 115 120 125

Asp Pro Met Leu Glu Lys Arg Ser Val Gly Cys Arg Arg Cys Ala Val  
 130 135 140

Val Gly Asn Ser Gly Asn Leu Arg Glu Ser Ser Tyr Gly Pro Glu Ile  
 145 150 155 160

Asp Ser His Asp Phe Val Leu Arg Met Asn Lys Ala Pro Thr Ala Gly  
 165 170 175

Phe Glu Ala Asp Val Gly Thr Lys Thr Thr His His Leu Val Tyr Pro  
 180 185 190

Glu Ser Phe Arg Glu Leu Gly Asp Asn Val Ser Met Ile Leu Val Pro  
 195 200 205

URO-B-0001 PCT1 listage sequence DEPOT

Phe Lys Thr Ile Asp Leu Glu Trp Val Val Ser Ala Ile Thr Thr Gly  
210 215 220

Thr Ile Ser His Thr Tyr Ile Pro Val Pro Ala Lys Ile Arg Val Lys  
225 230 235 240

Gln Asp Lys Ile Leu Ile Tyr His Pro Ala Phe Ile Lys Tyr Val Phe  
245 250 255

Asp Asn Trp Leu Gln Gly His Gly Arg Tyr Pro Ser Thr Gly Ile Leu  
260 265 270

Ser Val Ile Phe Ser Met His Val Cys Asp Glu Val Asp Leu Tyr Gly  
275 280 285

Phe Gly Ala Asp Ser Lys Gly Asn Trp His His Tyr Trp Glu Asn Asn  
290 295 300

Pro Ser Ala Gly Ala Phe Arg Lys Thr Gly Val His Asp Ala Asp Phe  
305 310 315 320

Glu Ser Asn Val Thr Ala Thr Leu Ala Ser Ile Asn Lys Ile Arg Ile  
325 330 335

Phe Lys Gly Arg  
340

<210> 41  
<211> 350  
<212> PRT  
<213> Homo sapiens  
<400> 41

Met Lys Cys Ser Leu Arg Val Trp Phe Leu Ser Val Ala Phe Leu Leu  
1 5 10 15

Val Phe Ile Met Ser Leu Leu Phe Thr Tyr Ser His His Ser Met Ala  
20 25 30

Thr Leu Pro Tyr Leu Asp Ser Gly Ala Leu Asp Gly Thr His Arg Val  
35 40 45

Lys Leu Val Pro Gly Tyr Ala Gly Leu Gln Arg Leu Ser Lys Glu Arg  
50 55 60

Leu Ser Gly Lys Ser Cys Ala Cys Arg Arg Cys Met Gly Asp Ala Gly  
65 70 75 80

Ala Ser Asp Trp Phe Asp Ser His Phe Asp Gly Asn Ile Ser Pro Val  
85 90 95

URO-B-0001 PCT1 listage sequence DEPOT

Trp Thr Arg Glu Asn Met Asp Leu Pro Pro Asp Val Gln Arg Trp Trp  
100 105 110

Met Met Leu Gln Pro Gln Phe Lys Ser His Asn Thr Asn Glu Val Leu  
115 120 125

Glu Lys Leu Phe Gln Ile Val Pro Gly Glu Asn Pro Tyr Arg Phe Arg  
130 135 140

Asp Pro His Gln Cys Arg Arg Cys Ala Val Val Gly Asn Ser Gly Asn  
145 150 155 160

Leu Arg Gly Ser Gly Tyr Gly Gln Asp Val Asp Gly His Asn Phe Ile  
165 170 175

Met Arg Met Asn Gln Ala Pro Thr Val Gly Phe Glu Gln Asp Val Gly  
180 185 190

Ser Arg Thr Thr His His Phe Met Tyr Pro Glu Ser Ala Lys Asn Leu  
195 200 205

Pro Ala Asn Val Ser Phe Val Leu Val Pro Phe Lys Val Leu Asp Leu  
210 215 220

Leu Trp Ile Ala Ser Ala Leu Ser Thr Gly Gln Ile Arg Phe Thr Tyr  
225 230 235 240

Ala Pro Val Lys Ser Phe Leu Arg Val Asp Lys Glu Lys Val Gln Ile  
245 250 255

Tyr Asn Pro Ala Phe Phe Lys Tyr Ile His Asp Arg Trp Thr Glu His  
260 265 270

His Gly Arg Tyr Pro Ser Thr Gly Met Leu Val Leu Phe Phe Ala Leu  
275 280 285

His Val Cys Asp Glu Val Asn Val Tyr Gly Phe Gly Ala Asp Ser Arg  
290 295 300

Gly Asn Trp His His Tyr Trp Glu Asn Asn Arg Tyr Ala Gly Glu Phe  
305 310 315 320

Arg Lys Thr Gly Val His Asp Ala Asp Phe Glu Ala His Ile Ile Asp  
325 330 335

Met Leu Ala Lys Ala Ser Lys Ile Glu Val Tyr Arg Gly Asn  
340 345 350

<210> 42  
<211> 444  
<212> PRT

URO-B-0001 PCT1 listage sequence DEPOT

<213> Homo sapiens

<400> 42

Met Gly Leu Leu Val Phe Val Arg Asn Leu Leu Leu Ala Leu Cys Leu  
1 5 10 15

Phe Leu Val Leu Gly Phe Leu Tyr Tyr Ser Ala Trp Lys Leu His Leu  
20 25 30

Leu Gln Trp Glu Glu Asp Ser Ser Lys Tyr Ser His Ser Ser Ser Pro  
35 40 45

Gln Glu Lys Pro Val Ala Asp Ser Val Val Leu Ser Phe Asp Ser Ala  
50 55 60

Gly Gln Thr Leu Gly Ser Glu Tyr Asp Arg Leu Gly Phe Leu Leu Asn  
65 70 75 80

Leu Asp Ser Lys Leu Ser Pro Arg Thr Leu Cys Thr Val Val Phe Gly  
85 90 95

Leu Asp Cys Ile Leu Glu Ser Pro Gly Glu Pro Lys Lys Leu Leu Met  
100 105 110

Pro Ala Ser His Pro Leu Glu Ile Leu Lys Ser Leu Ser Glu Asp Thr  
115 120 125

Ala Phe Ala Leu Gly Phe Leu Lys Leu Pro Arg Pro Ala Glu Leu Ala  
130 135 140

Thr Lys Tyr Ala Asn Phe Ser Glu Gly Ala Cys Lys Pro Gly Tyr Ala  
145 150 155 160

Ser Ala Leu Met Thr Ala Ile Phe Pro Arg Phe Ser Lys Pro Ala Pro  
165 170 175

Met Phe Leu Asp Asp Ser Phe Arg Lys Trp Ala Arg Ile Arg Glu Phe  
180 185 190

Val Pro Pro Phe Gly Ile Lys Gly Gln Asp Asn Leu Ile Lys Ala Ile  
195 200 205

Leu Ser Val Thr Lys Glu Tyr Arg Leu Thr Pro Ala Leu Asp Ser Leu  
210 215 220

Arg Cys Arg Arg Cys Ile Ile Val Gly Asn Gly Gly Val Leu Ala Asn  
225 230 235 240

Lys Ser Leu Gly Ser Arg Ile Asp Asp Tyr Asp Ile Val Val Arg Leu  
245 250 255

URO-B-0001 PCT1 listage sequence DEPOT  
 Asn Ser Ala Pro Val Lys Gly Phe Glu Lys Asp Val Gly Ser Lys Thr  
                   260                  265                  270

Thr Leu Arg Ile Thr Tyr Pro Glu Gly Ala Met Gln Arg Pro Glu Gln  
                   275                  280                  285

Tyr Glu Arg Asp Ser Leu Phe Val Leu Ala Gly Phe Lys Trp Gln Asp  
                   290                  295                  300

Phe Lys Trp Leu Lys Tyr Ile Val Tyr Lys Glu Arg Val Ser Ala Ser  
                   305                  310                  315                  320

Asp Gly Phe Trp Lys Ser Val Ala Thr Arg Val Pro Lys Glu Pro Pro  
                   325                  330                  335

Glu Ile Arg Ile Leu Asn Pro Tyr Phe Ile Gln Glu Ala Ala Phe Thr  
                   340                  345                  350

Leu Ile Gly Leu Pro Phe Asn Asn Gly Leu Met Gly Arg Gly Asn Ile  
                   355                  360                  365

Pro Thr Leu Gly Ser Val Ala Val Thr Met Ala Leu His Gly Cys Asp  
                   370                  375                  380

Glu Val Ala Val Ala Gly Phe Gly Tyr Asp Met Ser Thr Pro Asn Ala  
                   385                  390                  395                  400

Pro Leu His Tyr Tyr Glu Thr Val Arg Met Ala Ala Ile Lys Glu Ser  
                   405                  410                  415

Trp Thr His Asn Ile Gln Arg Glu Lys Glu Phe Leu Arg Lys Leu Val  
                   420                  425                  430

Lys Ala Arg Val Ile Thr Asp Leu Ser Ser Gly Ile  
                   435                  440

<210> 43  
 <211> 390  
 <212> PRT  
 <213> Homo sapiens  
 <400> 43

Met Gly Leu Leu Val Phe Val Arg Asn Leu Leu Leu Ala Leu Cys Leu  
                   1                  5                  10                  15

Phe Leu Val Leu Gly Phe Leu Tyr Tyr Ser Ala Trp Lys Leu His Leu  
                   20                  25                  30

Leu Gln Trp Glu Glu Asp Ser Ser Lys Tyr Ser His Ser Ser Ser Pro  
                   35                  40                  45

Gln Glu Lys Pro Val Ala Asp Ser Val Val Leu Ser Phe Asp Ser Ala

URO-B-0001 PCT1 listage sequence DEPOT

50

55

60

Gly Gln Thr Leu Gly Ser Glu Tyr Asp Arg Leu Gly Phe Leu Leu Asn  
65 70 75 80

Leu Asp Ser Lys Leu Pro Ala Glu Leu Ala Thr Lys Tyr Ala Asn Phe  
85 90 95

Ser Glu Gly Ala Cys Lys Pro Gly Tyr Ala Ser Ala Leu Met Thr Ala  
100 105 110

Ile Phe Pro Arg Phe Ser Lys Pro Ala Pro Met Phe Leu Asp Asp Ser  
115 120 125

Phe Arg Lys Trp Ala Arg Ile Arg Glu Phe Val Pro Pro Phe Gly Ile  
130 135 140

Lys Gly Gln Asp Asn Leu Ile Lys Ala Ile Leu Ser Val Thr Lys Glu  
145 150 155 160

Tyr Arg Leu Thr Pro Ala Leu Asp Ser Leu Arg Cys Arg Arg Cys Ile  
165 170 175

Ile Val Gly Asn Gly Gly Val Leu Ala Asn Lys Ser Leu Gly Ser Arg  
180 185 190

Ile Asp Asp Tyr Asp Ile Val Val Arg Leu Asn Ser Ala Pro Val Lys  
195 200 205

Gly Phe Glu Lys Asp Val Gly Ser Lys Thr Thr Leu Arg Ile Thr Tyr  
210 215 220

Pro Glu Gly Ala Met Gln Arg Pro Glu Gln Tyr Glu Arg Asp Ser Leu  
225 230 235 240

Phe Val Leu Ala Gly Phe Lys Trp Gln Asp Phe Lys Trp Leu Lys Tyr  
245 250 255

Ile Val Tyr Lys Glu Arg Val Ser Ala Ser Asp Gly Phe Trp Lys Ser  
260 265 270

Val Ala Thr Arg Val Pro Lys Glu Pro Pro Glu Ile Arg Ile Leu Asn  
275 280 285

Pro Tyr Phe Ile Gln Glu Ala Ala Phe Thr Leu Ile Gly Leu Pro Phe  
290 295 300

Asn Asn Gly Leu Met Gly Arg Gly Asn Ile Pro Thr Leu Gly Ser Val  
305 310 315 320

Ala Val Thr Met Ala Leu His Gly Cys Asp Glu Val Ala Val Ala Gly



URO-B-0001 PCT1 listage sequence DEPOT  
 325 330 335

Phe Gly Tyr Asp Met Ser Thr Pro Asn Ala Pro Leu His Tyr Tyr Glu  
 340 345 350

Thr Val Arg Met Ala Ala Ile Lys Glu Ser Trp Thr His Asn Ile Gln  
 355 360 365

Arg Glu Lys Glu Phe Leu Arg Lys Leu Val Lys Ala Arg Val Ile Thr  
 370 375 380

Asp Leu Ser Ser Gly Ile  
 385 390

<210> 44  
 <211> 170  
 <212> PRT  
 <213> Homo sapiens

<400> 44

Met Gly Leu Leu Val Phe Val Arg Asn Leu Leu Leu Ala Leu Cys Leu  
 1 5 10 15

Phe Leu Val Leu Gly Phe Leu Tyr Tyr Ser Ala Trp Lys Leu His Leu  
 20 25 30

Leu Gln Trp Glu Glu Asp Ser Ser Lys Tyr Ser His Ser Ser Ser Pro  
 35 40 45

Gln Glu Lys Pro Val Ala Asp Ser Val Val Leu Ser Phe Asp Ser Ala  
 50 55 60

Gly Gln Thr Leu Gly Ser Glu Tyr Asp Arg Leu Gly Phe Leu Leu Asn  
 65 70 75 80

Leu Asp Ser Lys Leu Pro Ala Glu Leu Ala Thr Lys Tyr Ala Asn Phe  
 85 90 95

Ser Glu Gly Ala Cys Lys Pro Gly Tyr Ala Ser Ala Leu Met Thr Ala  
 100 105 110

Ile Phe Pro Arg Phe Ser Lys Pro Ala Pro Met Phe Leu Asp Asp Ser  
 115 120 125

Phe Arg Lys Trp Ala Arg Ile Arg Glu Phe Val Pro Pro Phe Gly Ile  
 130 135 140

Lys Gly Gln Val Leu Asp Ala Gln Tyr Pro Ala Arg Glu Arg Val Ser  
 145 150 155 160

Ala Glu Ala Gly Glu Ser Ser Arg His His  
 165 170

URO-B-0001 PCT1 listage sequence DEPOT

<210> 45  
 <211> 429  
 <212> PRT  
 <213> Homo sapiens

<400> 45

Met Gly Leu Leu Val Phe Val Arg Asn Leu Leu Leu Ala Leu Cys Leu  
 1 5 10 15

Phe Leu Val Leu Gly Phe Leu Tyr Tyr Ser Ala Trp Lys Leu His Leu  
 20 25 30

Leu Gln Trp Glu Glu Asp Ser Asn Ser Val Val Leu Ser Phe Asp Ser  
 35 40 45

Ala Gly Gln Thr Leu Gly Ser Glu Tyr Asp Arg Leu Gly Phe Leu Leu  
 50 55 60

Asn Leu Asp Ser Lys Leu Ser Pro Arg Thr Leu Cys Thr Val Val Phe  
 65 70 75 80

Gly Leu Asp Cys Ile Leu Glu Ser Pro Gly Glu Pro Lys Lys Leu Leu  
 85 90 95

Met Pro Ala Ser His Pro Leu Glu Ile Leu Lys Ser Leu Ser Glu Asp  
 100 105 110

Thr Ala Phe Ala Leu Gly Phe Leu Lys Leu Pro Arg Pro Ala Glu Leu  
 115 120 125

Ala Thr Lys Tyr Ala Asn Phe Ser Glu Gly Ala Cys Lys Pro Gly Tyr  
 130 135 140

Ala Ser Ala Leu Met Thr Ala Ile Phe Pro Arg Phe Ser Lys Pro Ala  
 145 150 155 160

Pro Met Phe Leu Asp Asp Ser Phe Arg Lys Trp Ala Arg Ile Arg Glu  
 165 170 175

Phe Val Pro Pro Phe Gly Ile Lys Gly Gln Asp Asn Leu Ile Lys Ala  
 180 185 190

Ile Leu Ser Val Thr Lys Glu Tyr Arg Leu Thr Pro Ala Leu Asp Ser  
 195 200 205

Leu Arg Cys Arg Arg Cys Ile Ile Val Gly Asn Gly Gly Val Leu Ala  
 210 215 220

Asn Lys Ser Leu Gly Ser Arg Ile Asp Asp Tyr Asp Ile Val Val Arg  
 225 230 235 240

URO-B-0001 PCT1 listage sequence DEPOT

Leu Asn Ser Ala Pro Val Lys Gly Phe Glu Lys Asp Val Gly Ser Lys  
245 250 255

Thr Thr Leu Arg Ile Thr Tyr Pro Glu Gly Ala Met Gln Arg Pro Glu  
260 265 270

Gln Tyr Glu Arg Asp Ser Leu Phe Val Leu Ala Gly Phe Lys Trp Gln  
275 280 285

Asp Phe Lys Trp Leu Lys Tyr Ile Val Tyr Lys Glu Arg Val Ser Ala  
290 295 300

Ser Asp Gly Phe Trp Lys Ser Val Ala Thr Arg Val Pro Lys Glu Pro  
305 310 315 320

Pro Glu Ile Arg Ile Leu Asn Pro Tyr Phe Ile Gln Glu Ala Ala Phe  
325 330 335

Thr Leu Ile Gly Leu Pro Phe Asn Asn Gly Leu Met Gly Arg Gly Asn  
340 345 350

Ile Pro Thr Leu Gly Ser Val Ala Val Thr Met Ala Leu His Gly Cys  
355 360 365

Asp Glu Val Ala Val Ala Gly Phe Gly Tyr Asp Met Ser Thr Pro Asn  
370 375 380

Ala Pro Leu His Tyr Tyr Glu Thr Val Arg Met Ala Ala Ile Lys Glu  
385 390 395 400

Ser Trp Thr His Asn Ile Gln Arg Glu Lys Glu Phe Leu Arg Lys Leu  
405 410 415

Val Lys Ala Arg Val Ile Thr Asp Leu Ser Ser Gly Ile  
420 425

<210> 46  
<211> 375  
<212> PRT  
<213> Homo sapiens

<400> 46

Met Gly Leu Leu Val Phe Val Arg Asn Leu Leu Leu Ala Leu Cys Leu  
1 5 10 15

Phe Leu Val Leu Gly Phe Leu Tyr Tyr Ser Ala Trp Lys Leu His Leu  
20 25 30

Leu Gln Trp Glu Glu Asp Ser Asn Ser Val Val Leu Ser Phe Asp Ser  
35 40 45

URO-B-0001 PCT1 listage sequence DEPOT

Ala Gly Gln Thr Leu Gly Ser Glu Tyr Asp Arg Leu Gly Phe Leu Leu  
50 55 60

Asn Leu Asp Ser Lys Leu Pro Ala Glu Leu Ala Thr Lys Tyr Ala Asn  
65 70 75 80

Phe Ser Glu Gly Ala Cys Lys Pro Gly Tyr Ala Ser Ala Leu Met Thr  
85 90 95

Ala Ile Phe Pro Arg Phe Ser Lys Pro Ala Pro Met Phe Leu Asp Asp  
100 105 110

Ser Phe Arg Lys Trp Ala Arg Ile Arg Glu Phe Val Pro Pro Phe Gly  
115 120 125

Ile Lys Gly Gln Asp Asn Leu Ile Lys Ala Ile Leu Ser Val Thr Lys  
130 135 140

Glu Tyr Arg Leu Thr Pro Ala Leu Asp Ser Leu Arg Cys Arg Arg Cys  
145 150 155 160

Ile Ile Val Gly Asn Gly Gly Val Leu Ala Asn Lys Ser Leu Gly Ser  
165 170 175

Arg Ile Asp Asp Tyr Asp Ile Val Val Arg Leu Asn Ser Ala Pro Val  
180 185 190

Lys Gly Phe Glu Lys Asp Val Gly Ser Lys Thr Thr Leu Arg Ile Thr  
195 200 205

Tyr Pro Glu Gly Ala Met Gln Arg Pro Glu Gln Tyr Glu Arg Asp Ser  
210 215 220

Leu Phe Val Leu Ala Gly Phe Lys Trp Gln Asp Phe Lys Trp Leu Lys  
225 230 235 240

Tyr Ile Val Tyr Lys Glu Arg Val Ser Ala Ser Asp Gly Phe Trp Lys  
245 250 255

Ser Val Ala Thr Arg Val Pro Lys Glu Pro Pro Glu Ile Arg Ile Leu  
260 265 270

Asn Pro Tyr Phe Ile Gln Glu Ala Ala Phe Thr Leu Ile Gly Leu Pro  
275 280 285

Phe Asn Asn Gly Leu Met Gly Arg Gly Asn Ile Pro Thr Leu Gly Ser  
290 295 300

Val Ala Val Thr Met Ala Leu His Gly Cys Asp Glu Val Ala Val Ala  
305 310 315 320

URO-B-0001 PCT1 listage sequence DEPT

Gly Phe Gly Tyr Asp Met Ser Thr Pro Asn Ala Pro Leu His Tyr Tyr

325 330 335

Gln Arg Glu Lys Glu Phe Leu Arg Lys Leu Val Lys Ala Arg Val Ile  
355 360 365

Thr Asp Leu Ser Ser Gly Ile  
370 375

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<210> 47
<211> 277
<212> PRT
<213> Homo sapiens
```

<400> 47

Met Gly Leu Leu Val Phe Val Arg Asn Leu Leu Leu Ala Leu Cys Leu  
1 5 10 15

Phe Leu Val Leu Gly Phe Leu Tyr Tyr Ser Ala Trp Lys Leu His Leu  
20 25 30

Leu Gln Trp Glu Glu Asp Ser Asn Ser Val Val Leu Ser Phe Asp Ser  
35 40 45

Ala Gly Gln Thr Leu Gly Ser Glu Tyr Asp Arg Leu Gly Phe Leu Leu  
50 55 60

Asn Leu Asp Ser Lys Leu Pro Ala Glu Leu Ala Thr Lys Tyr Ala Asn  
65 70 75 80

Phe Ser Glu Gly Ala Cys Lys Pro Gly Tyr Ala Ser Ala Leu Met Thr  
85 90 95

Ala Ile Phe Pro Arg Phe Ser Lys Pro Ala Pro Met Phe Leu Asp Asp  
100 105 110

Ser Phe Arg Lys Trp Ala Arg Ile Arg Glu Phe Val Pro Pro Phe Gly  
115 120 125

Ile Lys Gly Gln Asp Asn Leu Ile Lys Ala Ile Leu Ser Val Thr Lys  
130 135 140

Glu Tyr Arg Leu Thr Pro Ala Leu Asp Ser Leu Arg Cys Arg Arg Cys  
145 150 155 160

Ile Ile Val Gly Asn Gly Gly Val Leu Ala Asn Lys Ser Leu Gly Ser  
165 170 175

Arg Ile Asp Asp Tyr Asp Ile Val Val Arg Leu Asn Ser Ala Pro Val

URO-B-0001 PCT1 listage sequence DEPOT  
180 185 190

Lys Gly Phe Glu Lys Asp Val Gly Ser Lys Thr Thr Leu Arg Ile Thr  
195 200 205

Tyr Pro Glu Gly Ala Met Gln Arg Pro Glu Gln Tyr Glu Arg Asp Ser  
210 215 220

Leu Phe Val Leu Ala Gly Phe Lys Trp Gln Asp Phe Lys Trp Leu Lys  
225 230 235 240

Tyr Ile Val Tyr Lys Glu Arg Val Ser Trp Thr His Asn Ile Gln Arg  
245 250 255

Glu Lys Glu Phe Leu Arg Lys Leu Val Lys Ala Arg Val Ile Thr Asp  
260 265 270

Leu Ser Ser Gly Ile  
275

<210> 48  
<211> 155  
<212> PRT  
<213> Homo sapiens  
<400> 48

Met Gly Leu Leu Val Phe Val Arg Asn Leu Leu Leu Ala Leu Cys Leu  
1 5 10 15

Phe Leu Val Leu Gly Phe Leu Tyr Tyr Ser Ala Trp Lys Leu His Leu  
20 25 30

Leu Gln Trp Glu Glu Asp Ser Asn Ser Val Val Leu Ser Phe Asp Ser  
35 40 45

Ala Gly Gln Thr Leu Gly Ser Glu Tyr Asp Arg Leu Gly Phe Leu Leu  
50 55 60

Asn Leu Asp Ser Lys Leu Pro Ala Glu Leu Ala Thr Lys Tyr Ala Asn  
65 70 75 80

Phe Ser Glu Gly Ala Cys Lys Pro Gly Tyr Ala Ser Ala Leu Met Thr  
85 90 95

Ala Ile Phe Pro Arg Phe Ser Lys Pro Ala Pro Met Phe Leu Asp Asp  
100 105 110

Ser Phe Arg Lys Trp Ala Arg Ile Arg Glu Phe Val Pro Pro Phe Gly  
115 120 125

Ile Lys Gly Gln Val Leu Asp Ala Gln Tyr Pro Ala Arg Glu Arg Val  
130 135 140

URO-B-0001 PCT1 listage sequence DEPOT

Ser Ala Glu Ala Gly Glu Ser Ser Arg His His  
145 150 155

<210> 49  
<211> 413  
<212> PRT  
<213> Homo sapiens  
  
<400> 49

Met Gly Leu Leu Val Phe Val Arg Asn Leu Leu Leu Ala Leu Cys Leu  
1 5 10 15

Phe Leu Val Leu Gly Phe Leu Tyr Tyr Ser Ala Trp Lys Leu His Leu  
20 25 30

Leu Gln Trp Glu Glu Asp Ser Lys Tyr Asp Arg Leu Gly Phe Leu Leu  
35 40 45

Asn Leu Asp Ser Lys Leu Ser Pro Arg Thr Leu Cys Thr Val Val Phe  
50 55 60

Gly Leu Asp Cys Ile Leu Glu Ser Pro Gly Glu Pro Lys Lys Leu Leu  
65 70 75 80

Met Pro Ala Ser His Pro Leu Glu Ile Leu Lys Ser Leu Ser Glu Asp  
85 90 95

Thr Ala Phe Ala Leu Gly Phe Leu Lys Leu Pro Arg Pro Ala Glu Leu  
100 105 110

Ala Thr Lys Tyr Ala Asn Phe Ser Glu Gly Ala Cys Lys Pro Gly Tyr  
115 120 125

Ala Ser Ala Leu Met Thr Ala Ile Phe Pro Arg Phe Ser Lys Pro Ala  
130 135 140

Pro Met Phe Leu Asp Asp Ser Phe Arg Lys Trp Ala Arg Ile Arg Glu  
145 150 155 160

Phe Val Pro Pro Phe Gly Ile Lys Gly Gln Asp Asn Leu Ile Lys Ala  
165 170 175

Ile Leu Ser Val Thr Lys Glu Tyr Arg Leu Thr Pro Ala Leu Asp Ser  
180 185 190

Leu Arg Cys Arg Arg Cys Ile Ile Val Gly Asn Gly Gly Val Leu Ala  
195 200 205

Asn Lys Ser Leu Gly Ser Arg Ile Asp Asp Tyr Asp Ile Val Val Arg  
210 215 220

URO-B-0001 PCT1 listage sequence DEPOT

Leu Asn Ser Ala Pro Val Lys Gly Phe Glu Lys Asp Val Gly Ser Lys  
225 230 235 240

Thr Thr Leu Arg Ile Thr Tyr Pro Glu Gly Ala Met Gln Arg Pro Glu  
245 250 255

Gln Tyr Glu Arg Asp Ser Leu Phe Val Leu Ala Gly Phe Lys Trp Gln  
260 265 270

Asp Phe Lys Trp Leu Lys Tyr Ile Val Tyr Lys Glu Arg Val Ser Ala  
275 280 285

Ser Asp Gly Phe Trp Lys Ser Val Ala Thr Arg Val Pro Lys Glu Pro  
290 295 300

Pro Glu Ile Arg Ile Leu Asn Pro Tyr Phe Ile Gln Glu Ala Ala Phe  
305 310 315 320

Thr Leu Ile Gly Leu Pro Phe Asn Asn Gly Leu Met Gly Arg Gly Asn  
325 330 335

Ile Pro Thr Leu Gly Ser Val Ala Val Thr Met Ala Leu His Gly Cys  
340 345 350

Asp Glu Val Ala Val Ala Gly Phe Gly Tyr Asp Met Ser Thr Pro Asn  
355 360 365

Ala Pro Leu His Tyr Tyr Glu Thr Val Arg Met Ala Ala Ile Lys Glu  
370 375 380

Ser Trp Thr His Asn Ile Gln Arg Glu Lys Glu Phe Leu Arg Lys Leu  
385 390 395 400

Val Lys Ala Arg Val Ile Thr Asp Leu Ser Ser Gly Ile  
405 410

<210> 50  
<211> 359  
<212> PRT  
<213> Homo sapiens

<400> 50

Met Gly Leu Leu Val Phe Val Arg Asn Leu Leu Leu Ala Leu Cys Leu  
1 5 10 15

Phe Leu Val Leu Gly Phe Leu Tyr Tyr Ser Ala Trp Lys Leu His Leu  
20 25 30

Leu Gln Trp Glu Glu Asp Ser Lys Tyr Asp Arg Leu Gly Phe Leu Leu  
35 40 45



URO-B-0001 PCT1 listage sequence DEPOT

Asn	Leu	Asp	Ser	Lys	Leu	Pro	Ala	Glu	Leu	Ala	Thr	Lys	Tyr	Ala	Asn
50						55					60				
Phe	Ser	Glu	Gly	Ala	Cys	Lys	Pro	Gly	Tyr	Ala	Ser	Ala	Leu	Met	Thr
65					70					75					80
Ala	Ile	Phe	Pro	Arg	Phe	Ser	Lys	Pro	Ala	Pro	Met	Phe	Leu	Asp	Asp
				85					90					95	
Ser	Phe	Arg	Lys	Trp	Ala	Arg	Ile	Arg	Glu	Phe	Val	Pro	Pro	Phe	Gly
			100					105					110		
Ile	Lys	Gly	Gln	Asp	Asn	Leu	Ile	Lys	Ala	Ile	Leu	Ser	Val	Thr	Lys
		115					120					125			
Glu	Tyr	Arg	Leu	Thr	Pro	Ala	Leu	Asp	Ser	Leu	Arg	Cys	Arg	Arg	Cys
	130					135					140				
Ile	Ile	Val	Gly	Asn	Gly	Gly	Val	Leu	Ala	Asn	Lys	Ser	Leu	Gly	Ser
145					150					155					160
Arg	Ile	Asp	Asp	Tyr	Asp	Ile	Val	Val	Arg	Leu	Asn	Ser	Ala	Pro	Val
				165					170					175	
Lys	Gly	Phe	Glu	Lys	Asp	Val	Gly	Ser	Lys	Thr	Thr	Leu	Arg	Ile	Thr
			180					185					190		
Tyr	Pro	Glu	Gly	Ala	Met	Gln	Arg	Pro	Glu	Gln	Tyr	Glu	Arg	Asp	Ser
		195					200					205			
Leu	Phe	Val	Leu	Ala	Gly	Phe	Lys	Trp	Gln	Asp	Phe	Lys	Trp	Leu	Lys
	210					215					220				
Tyr	Ile	Val	Tyr	Lys	Glu	Arg	Val	Ser	Ala	Ser	Asp	Gly	Phe	Trp	Lys
225					230					235					240
Ser	Val	Ala	Thr	Arg	Val	Pro	Lys	Glu	Pro	Pro	Glu	Ile	Arg	Ile	Leu
				245					250					255	
Asn	Pro	Tyr	Phe	Ile	Gln	Glu	Ala	Ala	Phe	Thr	Leu	Ile	Gly	Leu	Pro
			260					265					270		
Phe	Asn	Asn	Gly	Leu	Met	Gly	Arg	Gly	Asn	Ile	Pro	Thr	Leu	Gly	Ser
		275					280					285			
Val	Ala	Val	Thr	Met	Ala	Leu	His	Gly	Cys	Asp	Glu	Val	Ala	Val	Ala
	290					295					300				
Gly	Phe	Gly	Tyr	Asp	Met	Ser	Thr	Pro	Asn	Ala	Pro	Leu	His	Tyr	Tyr
305					310					315					320

URO-B-0001 PCT1 listage sequence DEPOT  
 Glu Thr Val Arg Met Ala Ala Ile Lys Glu Ser Trp Thr His Asn Ile  
                   325                  330                  335

Gln Arg Glu Lys Glu Phe Leu Arg Lys Leu Val Lys Ala Arg Val Ile  
                   340                  345                  350

Thr Asp Leu Ser Ser Gly Ile  
                   355

<210> 51  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 51

Met Gly Leu Leu Val Phe Val Arg Asn Leu Leu Leu Ala Leu Cys Leu  
 1                  5                  10                  15

Phe Leu Val Leu Gly Phe Leu Tyr Tyr Ser Ala Trp Lys Leu His Leu  
                   20                  25                  30

Leu Gln Trp Glu Glu Asp Ser Lys Tyr Asp Arg Leu Gly Phe Leu Leu  
                   35                  40                  45

Asn Leu Asp Ser Lys Leu Pro Ala Glu Leu Ala Thr Lys Tyr Ala Asn  
                   50                  55                  60

Phe Ser Glu Gly Ala Cys Lys Pro Gly Tyr Ala Ser Ala Leu Met Thr  
 65                  70                  75                  80

Ala Ile Phe Pro Arg Phe Ser Lys Pro Ala Pro Met Phe Leu Asp Asp  
                   85                  90                  95

Ser Phe Arg Lys Trp Ala Arg Ile Arg Glu Phe Val Pro Pro Phe Gly  
                   100                  105                  110

Ile Lys Gly Gln Val Leu Asp Ala Gln Tyr Pro Ala Arg Glu Arg Val  
                   115                  120                  125

Ser Ala Glu Ala Gly Glu Ser Ser Arg His His  
                   130                  135

<210> 52  
 <211> 331  
 <212> PRT  
 <213> Homo sapiens

<400> 52

Met Arg Gly Tyr Leu Val Ala Ile Phe Leu Ser Ala Val Phe Leu Tyr  
 1                  5                  10                  15

Tyr Val Leu His Cys Ile Leu Trp Gly Thr Asn Val Tyr Trp Val Ala  
                   20                  25                  30

URO-B-0001 PCT1 listage sequence DEPOT

Pro Val Glu Met Lys Arg Arg Asn Lys Ile Gln Pro Cys Leu Ser Lys  
35 40 45

Pro Ala Phe Ala Ser Leu Leu Arg Phe His Gln Phe His Pro Phe Leu  
50 55 60

Cys Ala Ala Asp Phe Arg Lys Ile Ala Ser Leu Tyr Gly Ser Asp Lys  
65 70 75 80

Phe Asp Leu Pro Tyr Gly Met Arg Thr Ser Ala Glu Tyr Phe Arg Leu  
85 90 95

Ala Leu Ser Lys Leu Gln Ser Cys Asp Leu Phe Asp Glu Phe Asp Asn  
100 105 110

Ile Pro Cys Lys Lys Cys Val Val Val Gly Asn Gly Gly Val Leu Lys  
115 120 125

Asn Lys Thr Leu Gly Glu Lys Ile Asp Ser Tyr Asp Val Ile Ile Arg  
130 135 140

Met Asn Asn Gly Pro Val Leu Gly His Glu Glu Glu Val Gly Arg Arg  
145 150 155 160

Thr Thr Phe Arg Leu Phe Tyr Pro Glu Ser Val Phe Ser Asp Pro Ile  
165 170 175

His Asn Asp Pro Asn Thr Thr Val Ile Leu Thr Ala Phe Lys Pro His  
180 185 190

Asp Leu Arg Trp Leu Leu Glu Leu Leu Met Gly Asp Lys Ile Asn Thr  
195 200 205

Asn Gly Phe Trp Lys Lys Pro Ala Leu Asn Leu Ile Tyr Lys Pro Tyr  
210 215 220

Gln Ile Arg Ile Leu Asp Pro Phe Ile Ile Arg Thr Ala Ala Tyr Glu  
225 230 235 240

Leu Leu His Phe Pro Lys Val Phe Pro Lys Asn Gln Lys Pro Lys His  
245 250 255

Pro Thr Thr Gly Ile Ile Ala Ile Thr Leu Ala Phe Tyr Ile Cys His  
260 265 270

Glu Val His Leu Ala Gly Phe Lys Tyr Asn Phe Ser Asp Leu Lys Ser  
275 280 285

Pro Leu His Tyr Tyr Gly Asn Ala Thr Met Ser Leu Met Asn Lys Asn  
290 295 300

URO-B-0001 PCT1 listage sequence DEPOT

Ala Tyr His Asn Val Thr Ala Glu Gln Leu Phe Leu Lys Asp Ile Ile  
305 310 315 320

Glu Lys Asn Leu Val Ile Asn Leu Thr Gln Asp  
325 330

<210> 53  
<211> 753  
<212> PRT  
<213> Mus musculus

<400> 53

Met Glu Thr His Ala His Leu His Arg Glu Gln Ser Tyr Ala Gly Pro  
1 5 10 15

His Glu Leu Tyr Phe Lys Lys Leu Ser Ser Lys Lys Lys Gln Val Met  
20 25 30

Glu Lys Asn Gly Asn Asn Arg Lys Leu Arg Val Cys Val Ala Thr Cys  
35 40 45

Asn Arg Ala Asp Tyr Ser Lys Leu Ala Pro Ile Met Phe Gly Ile Lys  
50 55 60

Thr Glu Pro Ala Phe Phe Glu Leu Asp Val Val Val Leu Gly Ser His  
65 70 75 80

Leu Ile Asp Asp Tyr Gly Asn Thr Tyr Arg Met Ile Glu Gln Asp Asp  
85 90 95

Phe Asp Ile Asn Thr Arg Leu His Thr Ile Val Arg Gly Glu Asp Glu  
100 105 110

Ala Ala Met Val Glu Ser Val Gly Leu Ala Leu Val Lys Leu Pro Asp  
115 120 125

Val Leu Asn Arg Leu Lys Pro Asp Ile Met Ile Val His Gly Asp Arg  
130 135 140

Phe Asp Ala Leu Ala Leu Ala Thr Ser Ala Ala Leu Met Asn Ile Arg  
145 150 155 160

Ile Leu His Ile Glu Gly Gly Glu Val Ser Gly Thr Ile Asp Asp Ser  
165 170 175

Ile Arg His Ala Ile Thr Lys Leu Ala His Tyr His Val Cys Cys Thr  
180 185 190

Arg Ser Ala Glu Gln His Leu Ile Ser Met Cys Glu Asp His Asp Arg  
195 200 205

URO-B-0001 PCT1 listage sequence DEPOT

Ile Leu Leu Ala Gly Cys Pro Ser Tyr Asp Lys Leu Leu Ser Ala Lys  
210 215 220

Asn Lys Asp Tyr Met Ser Ile Ile Arg Met Trp Leu Gly Asp Asp Val  
225 230 235 240

Lys Cys Lys Asp Tyr Ile Val Ala Leu Gln His Pro Val Thr Thr Asp  
245 250 255

Ile Lys His Ser Ile Lys Met Phe Glu Leu Thr Leu Asp Ala Leu Ile  
260 265 270

Ser Phe Asn Lys Arg Thr Leu Val Leu Phe Pro Asn Ile Asp Ala Gly  
275 280 285

Ser Lys Glu Met Val Arg Val Met Arg Lys Lys Gly Ile Glu His His  
290 295 300

Pro Asn Phe Arg Ala Val Lys His Val Pro Phe Asp Gln Phe Ile Gln  
305 310 315 320

Leu Val Ala His Ala Gly Cys Met Ile Gly Asn Ser Ser Cys Gly Val  
325 330 335

Arg Glu Val Gly Ala Phe Gly Thr Pro Val Ile Asn Leu Gly Thr Arg  
340 345 350

Gln Ile Gly Arg Glu Thr Gly Glu Asn Val Leu His Val Arg Asp Ala  
355 360 365

Asp Thr Gln Asp Lys Ile Leu Gln Ala Leu His Leu Gln Phe Gly Lys  
370 375 380

Gln Tyr Pro Cys Ser Lys Ile Tyr Gly Asp Gly Asn Ala Val Pro Arg  
385 390 395 400

Ile Leu Lys Phe Leu Lys Ser Ile Asp Leu Gln Glu Pro Leu Gln Lys  
405 410 415

Lys Phe Cys Phe Pro Pro Val Lys Glu Asn Ile Ser Gln Asp Ile Asp  
420 425 430

His Ile Leu Glu Thr Leu Ser Ala Leu Ala Val Asp Leu Gly Gly Thr  
435 440 445

Asn Leu Arg Val Ala Ile Val Ser Met Lys Gly Glu Ile Val Lys Lys  
450 455 460

Tyr Thr Gln Phe Asn Pro Lys Thr Tyr Glu Glu Arg Ile Ser Leu Ile  
465 470 475 480

URO-B-0001 PCT1 listage sequence DEPOT

Leu Gln Met Cys Val Glu Ala Ala Ala Glu Ala Val Lys Leu Asn Cys  
 485 490 495  
 Arg Ile Leu Gly Val Gly Ile Ser Thr Gly Gly Arg Val Asn Pro Gln  
 500 505 510  
 Glu Gly Val Val Leu His Ser Thr Lys Leu Ile Gln Glu Trp Asn Ser  
 515 520 525  
 Val Asp Leu Arg Thr Pro Leu Ser Asp Thr Leu His Leu Pro Val Trp  
 530 535 540  
 Val Asp Asn Asp Gly Asn Cys Ala Ala Met Ala Glu Arg Lys Phe Gly  
 545 550 555 560  
 Gln Gly Lys Gly Gln Glu Asn Phe Val Thr Leu Ile Thr Gly Thr Gly  
 565 570 575  
 Ile Gly Gly Gly Ile Ile His Gln His Glu Leu Ile His Gly Ser Ser  
 580 585 590  
 Phe Cys Ala Ala Glu Leu Gly His Leu Val Val Ser Leu Asp Gly Pro  
 595 600 605  
 Asp Cys Ser Cys Gly Ser His Gly Cys Ile Glu Ala Tyr Ala Ser Gly  
 610 615 620  
 Met Ala Leu Gln Arg Glu Ala Lys Lys Leu His Asp Glu Asp Leu Leu  
 625 630 635 640  
 Leu Val Glu Gly Met Ser Val Pro Lys Asp Glu Ala Val Gly Ala Leu  
 645 650 655  
 His Leu Ile Gln Ala Ala Lys Leu Gly Asn Val Lys Ala Gln Ser Ile  
 660 665 670  
 Leu Arg Thr Ala Gly Thr Ala Leu Gly Leu Gly Val Val Asn Ile Leu  
 675 680 685  
 His Thr Met Asn Pro Ser Leu Val Ile Leu Ser Gly Val Leu Ala Ser  
 690 695 700  
 His Tyr Ile His Ile Val Lys Asp Val Ile Arg Gln Gln Ala Leu Ser  
 705 710 715 720  
 Ser Val Gln Asp Val Asp Val Val Val Ser Asp Leu Val Asp Pro Ala  
 725 730 735  
 Leu Leu Gly Ala Ala Ser Met Val Leu Asp Tyr Thr Thr Arg Arg Ile  
 740 745 750

URO-B-0001 PCT1 listage sequence DEPOT

His

<210> 54  
 <211> 722  
 <212> PRT  
 <213> Homo sapiens

<400> 54

Met Glu Lys Asn Gly Asn Asn Arg Lys Leu Arg Val Cys Val Ala Thr  
 1 5 10 15

Cys Asn Arg Ala Asp Tyr Ser Lys Leu Ala Pro Ile Met Phe Gly Ile  
 20 25 30

Lys Thr Glu Pro Glu Phe Phe Glu Leu Asp Val Val Val Leu Gly Ser  
 35 40 45

His Leu Ile Asp Asp Tyr Gly Asn Thr Tyr Arg Met Ile Glu Gln Asp  
 50 55 60

Asp Phe Asp Ile Asn Thr Arg Leu His Thr Ile Val Arg Gly Glu Asp  
 65 70 75 80

Glu Ala Ala Met Val Glu Ser Val Gly Leu Ala Leu Val Lys Leu Pro  
 85 90 95

Asp Val Leu Asn Arg Leu Lys Pro Asp Ile Met Ile Val His Gly Asp  
 100 105 110

Arg Phe Asp Ala Leu Ala Leu Ala Thr Ser Ala Ala Leu Met Asn Ile  
 115 120 125

Arg Ile Leu His Ile Glu Gly Gly Glu Val Ser Gly Thr Ile Asp Asp  
 130 135 140

Ser Ile Arg His Ala Ile Thr Lys Leu Ala His Tyr His Val Cys Cys  
 145 150 155 160

Thr Arg Ser Ala Glu Gln His Leu Ile Ser Met Cys Glu Asp His Asp  
 165 170 175

Arg Ile Leu Leu Ala Gly Cys Pro Ser Tyr Asp Lys Leu Leu Ser Ala  
 180 185 190

Lys Asn Lys Asp Tyr Met Ser Ile Ile Arg Met Trp Leu Gly Asp Asp  
 195 200 205

Val Lys Ser Lys Asp Tyr Ile Val Ala Leu Gln His Pro Val Thr Thr  
 210 215 220

URO-B-0001 PCT1 listage sequence DEPOT

Asp Ile Lys His Ser Ile Lys Met Phe Glu Leu Thr Leu Asp Ala Leu  
 225 230 235 240

Ile Ser Phe Asn Lys Arg Thr Leu Val Leu Phe Pro Asn Ile Asp Ala  
 245 250 255

Gly Ser Lys Glu Met Val Arg Val Met Arg Lys Lys Gly Ile Glu His  
 260 265 270

His Pro Asn Phe Arg Ala Val Lys His Val Pro Phe Asp Gln Phe Ile  
 275 280 285

Gln Leu Val Ala His Ala Gly Cys Met Ile Gly Asn Ser Ser Cys Gly  
 290 295 300

Val Arg Glu Val Gly Ala Phe Gly Thr Pro Val Ile Asn Leu Gly Thr  
 305 310 315 320

Arg Gln Ile Gly Arg Glu Thr Gly Glu Asn Val Leu His Val Arg Asp  
 325 330 335

Ala Asp Thr Gln Asp Lys Ile Leu Gln Ala Leu His Leu Gln Phe Gly  
 340 345 350

Lys Gln Tyr Pro Cys Ser Lys Ile Tyr Gly Asp Gly Asn Ala Val Pro  
 355 360 365

Arg Ile Leu Lys Phe Leu Lys Ser Ile Asp Leu Gln Glu Pro Leu Gln  
 370 375 380

Lys Lys Phe Cys Phe Pro Pro Val Lys Glu Asn Ile Ser Gln Asp Ile  
 385 390 395 400

Asp His Ile Leu Glu Thr Leu Ser Ala Leu Ala Val Asp Leu Gly Gly  
 405 410 415

Thr Asn Leu Arg Val Ala Ile Val Ser Met Lys Gly Glu Ile Val Lys  
 420 425 430

Lys Tyr Thr Gln Phe Asn Pro Lys Thr Tyr Glu Glu Arg Ile Asn Leu  
 435 440 445

Ile Leu Gln Met Cys Val Glu Ala Ala Ala Glu Ala Val Lys Leu Asn  
 450 455 460

Cys Arg Ile Leu Gly Val Gly Ile Ser Thr Gly Gly Arg Val Asn Pro  
 465 470 475 480

Arg Glu Gly Ile Val Leu His Ser Thr Lys Leu Ile Gln Glu Trp Asn  
 485 490 495



URO-B-0001 PCT1 listage sequence DEPOT  
 Ser Val Asp Leu Arg Thr Pro Leu Ser Asp Thr Leu His Leu Pro Val  
                   500                                  505                                  510

Trp Val Asp Asn Asp Gly Asn Cys Ala Ala Leu Ala Glu Arg Lys Phe  
                   515                                  520                                  525

Gly Gln Gly Lys Gly Leu Glu Asn Phe Val Thr Leu Ile Thr Gly Thr  
                   530                                  535                                  540

Gly Ile Gly Gly Gly Ile Ile His Gln His Glu Leu Ile His Gly Ser  
                   545                                  550                                  555                                  560

Ser Phe Cys Ala Ala Glu Leu Gly His Leu Val Val Ser Leu Asp Gly  
                                   565                                  570                                  575

Pro Asp Cys Ser Cys Gly Ser His Gly Cys Ile Glu Ala Tyr Ala Ser  
                                   580                                  585                                  590

Gly Met Ala Leu Gln Arg Glu Ala Lys Lys Leu His Asp Glu Asp Leu  
                   595                                  600                                  605

Leu Leu Val Glu Gly Met Ser Val Pro Lys Asp Glu Ala Val Gly Ala  
                   610                                  615                                  620

Leu His Leu Ile Gln Ala Ala Lys Leu Gly Asn Ala Lys Ala Gln Ser  
                   625                                  630                                  635                                  640

Ile Leu Arg Thr Ala Gly Thr Ala Leu Gly Leu Gly Val Val Asn Ile  
                                   645                                  650                                  655

Leu His Thr Met Asn Pro Ser Leu Val Ile Leu Ser Gly Val Leu Ala  
                                   660                                  665                                  670

Ser His Tyr Ile His Ile Val Lys Asp Val Ile Arg Gln Gln Ala Leu  
                   675                                  680                                  685

Ser Ser Val Gln Asp Val Asp Val Val Val Ser Asp Leu Val Asp Pro  
                   690                                  695                                  700

Ala Leu Leu Gly Ala Ala Ser Met Val Leu Asp Tyr Thr Thr Arg Arg  
                   705                                  710                                  715                                  720

Ile Tyr

<210> 55  
 <211> 427  
 <212> PRT  
 <213> Homo sapiens

<400> 55

Met Ser Lys Gly Leu Pro Ala Arg Gln Asp Met Glu Lys Glu Arg Glu

URO-B-0001 PCT1 listage sequence DEPOT

1 5 10 15

Thr Leu Gln Ala Trp Lys Glu Arg Val Gly Gln Glu Leu Asp Arg Val  
20 25 30

Val Ala Phe Trp Met Glu His Ser His Asp Gln Glu His Gly Gly Phe  
35 40 45

Phe Thr Cys Leu Gly Arg Glu Gly Arg Val Tyr Asp Asp Leu Lys Tyr  
50 55 60

Val Trp Leu Gln Gly Arg Gln Val Trp Met Tyr Cys Arg Leu Tyr Arg  
65 70 75 80

Thr Phe Glu Arg Phe Arg His Ala Gln Leu Leu Asp Ala Ala Lys Ala  
85 90 95

Gly Gly Glu Phe Leu Leu Arg Tyr Ala Arg Val Ala Pro Pro Gly Lys  
100 105 110

Lys Cys Ala Phe Val Leu Thr Arg Asp Gly Arg Pro Val Lys Val Gln  
115 120 125

Arg Thr Ile Phe Ser Glu Cys Phe Tyr Thr Met Ala Met Asn Glu Leu  
130 135 140

Trp Arg Ala Thr Gly Glu Val Arg Tyr Gln Thr Glu Ala Val Glu Met  
145 150 155 160

Met Asp Gln Ile Val His Trp Val Gln Glu Asp Ala Ser Gly Leu Gly  
165 170 175

Arg Pro Gln Leu Gln Gly Ala Pro Ala Ala Glu Pro Met Ala Val Pro  
180 185 190

Met Met Leu Leu Asn Leu Val Glu Gln Leu Gly Glu Ala Asp Glu Glu  
195 200 205

Leu Ala Gly Lys Tyr Ala Glu Leu Gly Asp Trp Cys Ala Arg Arg Ile  
210 215 220

Leu Gln His Val Gln Arg Asp Gly Gln Ala Val Leu Glu Asn Val Ser  
225 230 235 240

Glu Gly Gly Lys Glu Leu Pro Gly Cys Leu Gly Arg Gln Gln Asn Pro  
245 250 255

Gly His Thr Leu Glu Ala Gly Trp Phe Leu Leu Arg His Cys Ile Arg  
260 265 270

Lys Gly Asp Pro Glu Leu Arg Ala His Val Ile Asp Lys Phe Leu Leu

URO-B-0001 PCT1 listage sequence DEPOT  
 275 280 285

Leu Pro Phe His Ser Gly Trp Asp Pro Asp His Gly Gly Leu Phe Tyr  
 290 295 300

Phe Gln Asp Ala Asp Asn Phe Cys Pro Thr Gln Leu Glu Trp Ala Met  
 305 310 315 320

Lys Leu Trp Trp Pro His Ser Glu Ala Met Ile Ala Phe Leu Met Gly  
 325 330 335

Tyr Ser Asp Ser Gly Asp Pro Val Leu Leu Arg Leu Phe Tyr Gln Val  
 340 345 350

Ala Glu Tyr Thr Phe Arg Gln Phe Arg Asp Pro Glu Tyr Gly Glu Trp  
 355 360 365

Phe Gly Tyr Leu Ser Arg Glu Gly Lys Val Ala Leu Ser Ile Lys Gly  
 370 375 380

Gly Pro Phe Lys Gly Cys Phe His Val Pro Arg Cys Leu Ala Met Cys  
 385 390 395 400

Glu Glu Met Leu Gly Ala Leu Leu Ser Arg Pro Ala Pro Ala Pro Ser  
 405 410 415

Pro Ala Pro Thr Pro Ala Cys Arg Gly Ala Glu  
 420 425

<210> 56  
 <211> 359  
 <212> PRT  
 <213> Homo sapiens  
 <400> 56

Met Pro Leu Glu Leu Glu Leu Cys Pro Gly Arg Trp Val Gly Gly Gln  
 1 5 10 15

His Pro Cys Phe Ile Ile Ala Glu Ile Gly Gln Asn His Gln Gly Asp  
 20 25 30

Leu Asp Val Ala Lys Arg Met Ile Arg Met Ala Lys Glu Cys Gly Ala  
 35 40 45

Asp Cys Ala Lys Phe Gln Lys Ser Glu Leu Glu Phe Lys Phe Asn Arg  
 50 55 60

Lys Ala Leu Glu Arg Pro Tyr Thr Ser Lys His Ser Trp Gly Lys Thr  
 65 70 75 80

Tyr Gly Glu His Lys Arg His Leu Glu Phe Ser His Asp Gln Tyr Arg  
 85 90 95

URO-B-0001 PCT1 listage sequence DEPOT

Glu Leu Gln Arg Tyr Ala Glu Glu Val Gly Ile Phe Phe Thr Ala Ser  
 100 105 110  
 Gly Met Asp Glu Met Ala Val Glu Phe Leu His Glu Leu Asn Val Pro  
 115 120 125  
 Phe Phe Lys Val Gly Ser Gly Asp Thr Asn Asn Phe Pro Tyr Leu Glu  
 130 135 140  
 Lys Thr Ala Lys Lys Gly Arg Pro Met Val Ile Ser Ser Gly Met Gln  
 145 150 155 160  
 Ser Met Asp Thr Met Lys Gln Val Tyr Gln Ile Val Lys Pro Leu Asn  
 165 170 175  
 Pro Asn Phe Cys Phe Leu Gln Cys Thr Ser Ala Tyr Pro Leu Gln Pro  
 180 185 190  
 Glu Asp Val Asn Leu Arg Val Ile Ser Glu Tyr Gln Lys Leu Phe Pro  
 195 200 205  
 Asp Ile Pro Ile Gly Tyr Ser Gly His Glu Thr Gly Ile Ala Ile Ser  
 210 215 220  
 Val Ala Ala Val Ala Leu Gly Ala Lys Val Leu Glu Arg His Ile Thr  
 225 230 235 240  
 Leu Asp Lys Thr Trp Lys Gly Ser Asp His Ser Ala Ser Leu Glu Pro  
 245 250 255  
 Gly Glu Leu Ala Glu Leu Val Arg Ser Val Arg Leu Val Glu Arg Ala  
 260 265 270  
 Leu Gly Ser Pro Thr Lys Gln Leu Leu Pro Cys Glu Met Ala Cys Asn  
 275 280 285  
 Glu Lys Leu Gly Lys Ser Val Val Ala Lys Val Lys Ile Pro Glu Gly  
 290 295 300  
 Thr Ile Leu Thr Met Asp Met Leu Thr Val Lys Val Gly Glu Pro Lys  
 305 310 315 320  
 Gly Tyr Pro Pro Glu Asp Ile Phe Asn Leu Val Gly Lys Lys Val Leu  
 325 330 335  
 Val Thr Val Glu Glu Asp Asp Thr Ile Met Glu Glu Leu Val Asp Asn  
 340 345 350  
 His Gly Lys Lys Ile Lys Ser  
 355

URO-B-0001 PCT1 listage sequence DEPOT

<210> 57  
 <211> 432  
 <212> PRT  
 <213> Mus musculus

<400> 57

Met Asp Ala Leu Glu Lys Gly Ala Ala Thr Ser Gly Pro Ala Pro Arg  
 1 5 10 15

Gly Arg Pro Ser Arg Gly Arg Pro Pro Lys Leu Gln Arg Ser Arg Gly  
 20 25 30

Ala Gly Arg Gly Leu Glu Lys Pro Pro His Leu Ala Ala Leu Val Leu  
 35 40 45

Ala Arg Gly Gly Ser Lys Gly Ile Pro Leu Lys Asn Ile Lys Arg Leu  
 50 55 60

Ala Gly Val Pro Leu Ile Gly Trp Val Leu Arg Ala Ala Leu Asp Ala  
 65 70 75 80

Gly Val Phe Gln Ser Val Trp Val Ser Thr Asp His Asp Glu Ile Glu  
 85 90 95

Asn Val Ala Lys Gln Phe Gly Ala Gln Val His Arg Arg Ser Ser Glu  
 100 105 110

Thr Ser Lys Asp Ser Ser Thr Ser Leu Asp Ala Ile Val Glu Phe Leu  
 115 120 125

Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala Thr Ser  
 130 135 140

Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met Ile Arg  
 145 150 155 160

Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His Gln Phe  
 165 170 175

Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu Pro Leu  
 180 185 190

Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp Gly Glu  
 195 200 205

Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu Ile Glu  
 210 215 220

Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met Arg Ala  
 225 230 235 240

URO-B-0001 PCT1 listage sequence DEPOT

Glu His Ser Val Asp<sub>245</sub> Ile Asp Val Asp Ile<sub>250</sub> Asp Trp Pro Ile Ala<sub>255</sub> Glu

Gln Arg Val Leu<sub>260</sub> Arg Phe Gly Tyr Phe<sub>265</sub> Gly Lys Glu Lys Leu<sub>270</sub> Lys Glu

Ile Lys Leu<sub>275</sub> Leu Val Cys Asn Ile<sub>280</sub> Asp Gly Cys Leu Thr<sub>285</sub> Asn Gly His

Ile Tyr Val Ser Gly Asp Gln<sub>295</sub> Lys Glu Ile Ile Ser<sub>300</sub> Tyr Asp Val Lys

Asp Ala Ile Gly Ile Ser<sub>310</sub> Leu Leu Lys Lys Ser<sub>315</sub> Gly Ile Glu Val Arg<sub>320</sub>

Leu Ile Ser Glu Arg<sub>325</sub> Ala Cys Ser Lys Gln<sub>330</sub> Thr Leu Ser Ala Leu<sub>335</sub> Lys

Leu Asp Cys Lys<sub>340</sub> Thr Glu Val Ser Val<sub>345</sub> Ser Asp Lys Leu Ala<sub>350</sub> Thr Val

Asp Glu Trp Arg Lys Glu Met Gly<sub>360</sub> Leu Cys Trp Lys Glu<sub>365</sub> Val Ala Tyr

Leu Gly Asn Glu Val Ser Asp<sub>375</sub> Glu Glu Cys Leu Lys<sub>380</sub> Arg Val Gly Leu

Ser Ala Val Pro Ala Asp<sub>390</sub> Ala Cys Ser Gly Ala<sub>395</sub> Gln Lys Ala Val Gly<sub>400</sub>

Tyr Ile Cys Lys Cys<sub>405</sub> Ser Gly Gly Arg Gly<sub>410</sub> Ala Ile Arg Glu Phe<sub>415</sub> Ala

Glu His Ile Phe<sub>420</sub> Leu Leu Ile Glu Lys<sub>425</sub> Val Asn Asn Ser Cys<sub>430</sub> Gln Lys

<210> 58

<211> 434

<212> PRT

<213> Homo sapiens

<400> 58

Met Asp Ser Val Glu<sub>5</sub> Lys Gly Ala Ala Thr<sub>10</sub> Ser Val Ser Asn Pro Arg<sub>15</sub>

Gly Arg Pro Ser<sub>20</sub> Arg Gly Arg Pro<sub>25</sub> Lys Leu Gln Arg Asn Ser Arg<sub>30</sub>

Gly Gly Gln<sub>35</sub> Gly Arg Gly Val Glu<sub>40</sub> Lys Pro Pro His Leu<sub>45</sub> Ala Ala Leu

URO-B-0001 PCT1 listage sequence DEPOT

Ile Leu Ala Arg Gly Gly Ser Lys Gly Ile Pro Leu Lys Asn Ile Lys  
50 55 60

His Leu Ala Gly Val Pro Leu Ile Gly Trp Val Leu Arg Ala Ala Leu  
65 70 75 80

Asp Ser Gly Ala Phe Gln Ser Val Trp Val Ser Thr Asp His Asp Glu  
85 90 95

Ile Glu Asn Val Ala Lys Gln Phe Gly Ala Gln Val His Arg Arg Ser  
100 105 110

Ser Glu Val Ser Lys Asp Ser Ser Thr Ser Leu Asp Ala Ile Ile Glu  
115 120 125

Phe Leu Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala  
130 135 140

Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met  
145 150 155 160

Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His  
165 170 175

Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu  
180 185 190

Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp  
195 200 205

Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu  
210 215 220

Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met  
225 230 235 240

Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile  
245 250 255

Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu  
260 265 270

Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn  
275 280 285

Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp  
290 295 300

Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu  
305 310 315 320

URO-B-0001 PCT1 listage sequence DEPOT  
 Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser  
                   325                                  330                                  335

Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala  
                   340                                  345                                  350

Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val  
                   355                                  360                                  365

Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val  
                   370                                  375                                  380

Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala  
                   385                                  390                                  395                                  400

Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu  
                   405                                  410                                  415

Phe Ala Glu His Ile Cys Leu Leu Met Glu Lys Val Asn Asn Ser Cys  
                   420                                  425                                  430

Gln Lys

<210> 59  
 <211> 336  
 <212> PRT  
 <213> Mus musculus

<400> 59

Met Ala Pro Ala Arg Glu Asn Val Ser Leu Phe Phe Lys Leu Tyr Cys  
   1                  5                                  10                                  15

Leu Thr Val Met Thr Leu Val Ala Ala Tyr Thr Val Ala Leu Arg  
                   20                                  25                                  30

Tyr Thr Arg Thr Thr Ala Glu Glu Leu Tyr Phe Ser Thr Thr Ala Val  
                   35                                  40                                  45

Cys Ile Thr Glu Val Ile Lys Leu Leu Ile Ser Val Gly Leu Leu Ala  
                   50                                  55                                  60

Lys Glu Thr Gly Ser Leu Gly Arg Phe Lys Ala Ser Leu Ser Glu Asn  
                   65                                  70                                  75                                  80

Val Leu Gly Ser Pro Lys Glu Leu Ala Lys Leu Ser Val Pro Ser Leu  
                   85                                  90                                  95

Val Tyr Ala Val Gln Asn Asn Met Ala Phe Leu Ala Leu Ser Asn Leu  
                   100                                  105                                  110

Asp Ala Ala Val Tyr Gln Val Thr Tyr Gln Leu Lys Ile Pro Cys Thr





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115 120 125

Ala Leu Cys Thr Val Leu Met Leu Asn Arg Thr Leu Ser Lys Leu Gln  
130 135 140

Trp Ile Ser Val Phe Met Leu Cys Gly Gly Val Thr Leu Val Gln Trp  
145 150 155 160

Lys Pro Ala Gln Ala Thr Lys Val Val Val Ala Gln Asn Pro Leu Leu  
165 170 175

Gly Phe Gly Ala Ile Ala Ile Ala Val Leu Cys Ser Gly Phe Ala Gly  
180 185 190

Val Tyr Phe Glu Lys Val Leu Lys Ser Ser Asp Thr Ser Leu Trp Val  
195 200 205

Arg Asn Ile Gln Met Tyr Leu Ser Gly Ile Val Val Thr Leu Ala Gly  
210 215 220

Thr Tyr Leu Ser Asp Gly Ala Glu Ile Gln Glu Lys Gly Phe Phe Tyr  
225 230 235 240

Gly Tyr Thr Tyr Tyr Val Trp Phe Val Ile Phe Leu Ala Ser Val Gly  
245 250 255

Gly Leu Tyr Thr Ser Val Val Val Lys Tyr Thr Asp Asn Ile Met Lys  
260 265 270

Gly Phe Ser Ala Ala Ala Ala Ile Val Leu Ser Thr Ile Ala Ser Val  
275 280 285

Leu Leu Phe Gly Leu Gln Ile Thr Leu Ser Phe Ala Leu Gly Ala Leu  
290 295 300

Leu Val Cys Val Ser Ile Tyr Leu Tyr Gly Leu Pro Arg Gln Asp Thr  
305 310 315 320

Thr Ser Ile Gln Gln Glu Ala Thr Ser Lys Glu Arg Ile Ile Gly Val  
325 330 335

<210> 60  
<211> 337  
<212> PRT  
<213> Homo sapiens

<400> 60

Met Ala Ala Pro Arg Asp Asn Val Thr Leu Leu Phe Lys Leu Tyr Cys  
1 5 10 15

Leu Ala Val Met Thr Leu Met Ala Ala Val Tyr Thr Ile Ala Leu Arg  
20 25 30

URO-B-0001 PCT1 listage sequence DEPOT

Tyr Thr Arg Thr Ser Asp Lys Glu Leu Tyr Phe Ser Thr Thr Ala Val  
 35 40 45  
 Cys Ile Thr Glu Val Ile Lys Leu Leu Leu Ser Val Gly Ile Leu Ala  
 50 55 60  
 Lys Glu Thr Gly Ser Leu Gly Arg Phe Lys Ala Ser Leu Arg Glu Asn  
 65 70 75 80  
 Val Leu Gly Ser Pro Lys Glu Leu Leu Lys Leu Ser Val Pro Ser Leu  
 85 90 95  
 Val Tyr Ala Val Gln Asn Asn Met Ala Phe Leu Ala Leu Ser Asn Leu  
 100 105 110  
 Asp Ala Ala Val Tyr Gln Val Thr Tyr Gln Leu Lys Ile Pro Cys Thr  
 115 120 125  
 Ala Leu Cys Thr Val Leu Met Leu Asn Arg Thr Leu Ser Lys Leu Gln  
 130 135 140  
 Trp Val Ser Val Phe Met Leu Cys Ala Gly Val Thr Leu Val Gln Trp  
 145 150 155 160  
 Lys Pro Ala Gln Ala Thr Lys Val Val Val Glu Gln Asn Pro Leu Leu  
 165 170 175  
 Gly Phe Gly Ala Ile Ala Ile Ala Val Leu Cys Ser Gly Phe Ala Gly  
 180 185 190  
 Val Tyr Phe Glu Lys Val Leu Lys Ser Ser Asp Thr Ser Leu Trp Val  
 195 200 205  
 Arg Asn Ile Gln Met Tyr Leu Ser Gly Ile Ile Val Thr Leu Ala Gly  
 210 215 220  
 Val Tyr Leu Ser Asp Gly Ala Glu Ile Lys Glu Lys Gly Phe Phe Tyr  
 225 230 235 240  
 Gly Tyr Thr Tyr Tyr Val Trp Phe Val Ile Phe Leu Ala Ser Val Gly  
 245 250 255  
 Gly Leu Tyr Thr Ser Val Val Val Lys Tyr Thr Asp Asn Ile Met Lys  
 260 265 270  
 Gly Phe Ser Ala Ala Ala Ala Ile Val Leu Ser Thr Ile Ala Ser Val  
 275 280 285  
 Met Leu Phe Gly Leu Gln Ile Thr Leu Thr Phe Ala Leu Gly Thr Leu  
 290 295 300

URO-B-0001 PCT1 listage sequence DEPOT

Leu Val Cys Val Ser Ile Tyr Leu Tyr Gly Leu Pro Arg Gln Asp Thr  
305 310 315 320

Thr Ser Ile Gln Gln Gly Glu Thr Ala Ser Lys Glu Arg Val Ile Gly  
325 330 335

Val

<210> 61  
<211> 31  
<212> DNA  
<213> Artificial sequence

<220>  
<223> CaMV35Sfwd

<400> 61  
gaacatatgg tggattgatg tgatctactc c 31

<210> 62  
<211> 24  
<212> DNA  
<213> Artificial sequence

<220>  
<223> CaMV35Srev

<400> 62  
aattctcgag gaattcggcc gagg 24

<210> 63  
<211> 19  
<212> RNA  
<213> Artificial sequence

<220>  
<223> siRNA

<400> 63  
ggccauucgu uacuagcaa 19

<210> 64  
<211> 19  
<212> RNA  
<213> Artificial sequence

<220>  
<223> siRNA

<400> 64  
gugguucguu gggaaauga 19

<210> 65  
<211> 19  
<212> RNA  
<213> Artificial sequence

<220>

URO-B-0001 PCT1 listage sequence DEPOT

<223> siRNA  
 <400> 65  
 ccgucugugu gaaaauuggu 19

<210> 66  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> siRNA  
 <400> 66  
 cgguaguagu gcuuguugu 19

<210> 67  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> siRNA  
 <400> 67  
 cugccaugga uauugucaa 19

<210> 68  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> siRNA  
 <400> 68  
 gccuuugguc cugaagaaa 19

<210> 69  
 <211> 20  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Primer  
 <400> 69  
 agcaagagtg ctcgtgttgc 20

<210> 70  
 <211> 20  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Primer  
 <400> 70  
 acccgacgtc gtacgtttcc 20

<210> 71  
 <211> 20

URO-B-0001 PCT1 listage sequence DEPOT

<212> DNA  
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 <220>  
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 <400> 71  
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 tactcgtcgg taccctcgt 19  
 <210> 73  
 <211> 20  
 <212> DNA  
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 <400> 73  
 aggtccttcg cgacaatatc 20  
 <210> 74  
 <211> 20  
 <212> DNA  
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 <220>  
 <223> Primer  
 <400> 74  
 acggaatcac gaatgacgtt 20  
 <210> 75  
 <211> 21  
 <212> DNA  
 <213> Artificial sequence  
 <220>  
 <223> Primer  
 <400> 75  
 accgtgaaac agtggattgg a 21  
 <210> 76  
 <211> 22  
 <212> DNA  
 <213> Artificial sequence  
 <220>  
 <223> Primer  
 <400> 76  
 ctgggatgggt gtacgtcaat gt 22

URO-B-0001 PCT1 listage sequence DEPOT

<210> 77  
<211> 20  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Primer

<400> 77  
aggtccttcg cgacaatatc 20

<210> 78  
<211> 20  
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<220>  
<223> Primer

<400> 78  
acggaatcac gaatgacgtt 20

<210> 79  
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<212> DNA  
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<220>  
<223> BSI-25 vector

<400> 79  
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tgcaagcttc agaagcgtgc tatcgaactc aaccagggac gtgcggcaca aatgggcatc 120  
cttgctctca tgggtgcacga acagttggga gtctctatcc ttccttaaaa atttaatttt 180  
cattagttgc agtcactccg ctttggtttc acagtcagga ataactactag ctcgtcttca 240  
ccatggatgc caatctcgcc tattcatggt gtataaaagt tcaacatcca aagctagaac 300  
ttttggaaaag agaaagaata tccgaatagg gcacggcgtg ccgtattgtt ggagtggact 360  
agcagaaagt gaggaaggca caggatgagt tttctcgaga cataccttca gcgtcgtctt 420  
cactgtcaca gtcaactgac agtaatcgtt gatccggaga gattcaaaat tcaatctgtt 480  
tggaacctgga taagacacaa gagcgacatc ctgacatgaa cgccgtaaag agcaaactct 540  
gggtgaacac gtatcctttt gggggcctcc gctacgacgc tcgctccagc tggggcttcc 600  
ttactataca cagcgcgcac atttcacggt tgccagatgt caagatggcc aagttgacca 660  
gtgccgttcc ggtgctcacc gcgcgcgacg tcgccggagc ggtcgagttc tggaccgacc 720  
ggctcggggt ctcccgggac ttcgtggagg acgacttcgc cgggtgtggtc cgggacgacg 780  
tgacctgtt catcagcgcg gtccaggacc aggtggtgcc ggacaacacc ctggcctggg 840  
tgtgggtgcg cggcctggac gagctgtacg ccgagtggtc ggaggtcgtg tccacgaact 900  
tccgggacgc ctccgggccg gccatgaccg agatcggcga gcagccgtgg gggcgggagt 960  
tcgccctgcg cgacccggcc ggcaactgcg tgcacttcgt ggccgaggag caggactgaa 1020

URO-B-0001 PCT1 listage sequence DEPOT

ccttccttaa aaatttaatt ttcattagtt gcagtcactc cgctttgggtt tcacagtcag	1080
gaataacact agctcgtctt caccatggat gccaatctcg cctattcatg gtgtataaaa	1140
gttcaacatc caaagctaga acttttggaa agagaaagaa tatccgaata gggcacggcg	1200
tgccgtattg ttggagtgga ctagcagaaa gtgaggaagg cacaggatga gttttctcga	1260
ggccgggtctc cctatagtga gtcgtattaa tttcgataag ccaggttaac ctgcattaat	1320
gaatcggcca acgcgcgggg agaggcgggtt tgcgtattgg gcgctcttcc gcttcctcgc	1380
tcactgactc gctgcgctcg gtcgttcggc tgcggcgagc ggtatcagct cactcaaagg	1440
cggtaatcag gttatccaca gaatcagggg ataacgcagg aaagaacatg tgagcaaaag	1500
gccagcaaaa ggccaggaac cgtaaaaagg ccgcgttgct ggcgtttttc cataggctcc	1560
gccccctga cgagcatcac aaaaatcgac gtcgaagtca gaggtggcga aacccgacag	1620
gactataaag ataccaggcg tttccccctg gaagctccct cgtgcgctct cctgttccga	1680
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ctagaaggac agtatttggg atctgcgctc tgctgaagcc agttaccttc ggaaaaagag	2040
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cgatctgtct atttcgttca tccatagttg cctgactccc cgtcgtgtag ataactacga	2400
tacgggaggg cttaccatct ggccccagtg ctgcaatgat accgcgagac ccacgctcac	2460
cggctccaga tttatcagca ataaaccagc cagccggaag ggccgagcgc agaagtggtc	2520
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gttcgccagt taatagtttg cgcaacgttg ttgccattgc tacaggcatc gtggtgtcac	2640
gctcgtcgtt tggtagggtc tcattcagct ccggttccca acgatcaagg cgagttacat	2700
gatcccccat gttgtgcaaa aaagcgggta gtccttcgg tcctccgatc gttgtcagaa	2760
gtaagtggc cgcagtgtta tcactcatgg ttatggcagc actgcataat tctcttactg	2820
tcatgccatc cgtaagatgc ttttctgtga ctggtgagta ctcaaccaag tcattctgag	2880
aatagtgtat gcggcgaccg agttgctctt gcccggcgtc aatacgggat aataccgcgc	2940
cacatagcag aactttaaaa gtgctcatca ttggaaaacg ttcttcgggg cgaaaactct	3000
caaggatctt accgctgttg agatccagtt cgatgtaacc cactcgtgca cccaactgat	3060

URO-B-0001 PCT1 listage sequence DEPOT

cttcagcatc	ttttactttc	accagcgttt	ctgggtgagc	aaaaacagga	aggcaaatg	3120
ccgcaaaaaa	gggaataagg	gcgacacgga	aatgttgaat	actcactc	ttccttttc	3180
aatattattg	aagcatttat	caggggttatt	gtctcatgag	cggatacata	tttgaatgta	3240
tttagaaaaa	taaacaaata	ggggttccgc	gcacatttcc	ccgaaaagtg	ccacctgacg	3300
tctaagaaac	cattattatc	atgacattaa	cctataaaaa	taggcgtatc	acgaggccct	3360
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cgggtgttgg	cgggtgtcgg	ggctggctta	actatgcggc	atcagagcag	attgtactga	3540
gagtgcacca	tatggtggat	tgatgtgatc	tactccaaaa	atatcaaaga	tacagtctca	3600
gaagaccaa	gggcaattga	gacttttcaa	caaagggtaa	tatccgaaa	cctcctcgga	3660
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gggtcccaa	atggaccccc	accacgagg	agcatcgtgg	aaaaagaaga	cggtccaacc	3840
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ctacaaatgc	catcattgcg	ataaaggaaa	ggccatcgtt	gaagatgcct	ctgccgacag	4080
tggtcccaa	gatggacccc	caccacgag	gagcatcgtg	gaaaaagaag	acgttccaac	4140
cacgtcttca	aagcaagtgg	attgatgtga	tatctccact	gacgtaagg	atgacgcaca	4200
atcccactat	ccttcgcaag	acccttcctc	tatataagga	agttcatttc	attcggagag	4260
gtacgtattt	ttacaacaat	taccaacaac	aacaacaaac	aacaacaaca	ttacatttta	4320
cattctacaa	ctacatctag	aactagtgga	tccaaggaga	tataacaatg	aagactaatc	4380
tttttctctt	tctcatcttt	tcacttctcc	tatcattatc	ctcggccgaa	ttc	4433

<210> 80  
 <211> 819  
 <212> DNA  
 <213> Cauliflower mosaic virus

<400> 80	
catatggtgg	attgatgtga tctactccaa aaatatcaaa gatacagtct cagaagacca 60
aagggcaatt	gagacttttc aacaaagggt aatatccgga aacctcctcg gattccattg 120
cccagctatc	tgtcacttta ttgtgaagat agtggaaaag gaaggtggct cctacaaatg 180
ccatcattgc	gataaaggaa aggccatcgt tgaagatgcc tctgccgaca gtgggtccaa 240
agatggaccc	ccaccacga ggagcatcgt ggaaaaagaa gacgttccaa ccacgtcttc 300
aaagcaagtg	gattgatgtg atctactcca aaaatatcaa agatacagtc tcagaagacc 360
aaagggcaat	tgagactttt caacaaaggg taatatccgg aaacctcctc ggattccatt 420



URO-B-0001 PCT1 listage sequence DEPOT

gcccagctat ctgtcacttt attgtgaaga tagtggaata ggaaggtggc tcctacaaat	480
gccatcattg cgataaagga aaggccatcg ttgaagatgc ctctgccgac agtggtccca	540
aagatggacc cccacccacg aggagcatcg tggaaaaaga agacgttcca accacgtctt	600
caaagcaagt ggattgatgt gatattctcca ctgacgtaag ggatgacgca caatcccact	660
atccttcgca agacccttcc tctatataag gaagttcatt tcattcggag aggtacgtat	720
ttttacaaca attaccaaca acaacaacaa acaacaacaa cattacattt tacattctac	780
aactacatct agaactagtg gatccaagga gatataaca	819

<210> 81  
 <211> 66  
 <212> DNA  
 <213> Tobacco mosaic virus

<400> 81	
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gaattc	66