

## SEQUENCE LISTING

&lt;110&gt; AstraZeneca AB

&lt;120&gt; Use of a MCT1 inhibitor in the treatment of cancer 614

&lt;130&gt; 103614 TBR

&lt;160&gt; 8

&lt;170&gt; PatentIn version 3.4

&lt;210&gt; 1

&lt;211&gt; 500

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1

Met Pro Pro Ala Val Gly Gly Pro Val Gly Tyr Thr Pro Pro Asp Gly  
 1 5 10 15

Gly Trp Gly Trp Ala Val Val Ile Gly Ala Phe Ile Ser Ile Gly Phe  
 20 25 30

Ser Tyr Ala Phe Pro Lys Ser Ile Thr Val Phe Phe Lys Glu Ile Glu  
 35 40 45

Gly Ile Phe His Ala Thr Thr Ser Glu Val Ser Trp Ile Ser Ser Ile  
 50 55 60

Met Leu Ala Val Met Tyr Gly Gly Gly Pro Ile Ser Ser Ile Leu Val  
 65 70 75 80

Asn Lys Tyr Gly Ser Arg Ile Val Met Ile Val Gly Gly Cys Leu Ser  
 85 90 95

Gly Cys Gly Leu Ile Ala Ala Ser Phe Cys Asn Thr Val Gln Gln Leu  
 100 105 110

Tyr Val Cys Ile Gly Val Ile Gly Gly Leu Gly Leu Ala Phe Asn Leu  
 115 120 125

Asn Pro Ala Leu Thr Met Ile Gly Lys Tyr Phe Tyr Lys Arg Arg Pro  
 130 135 140

Leu Ala Asn Gly Leu Ala Met Ala Gly Ser Pro Val Phe Leu Cys Thr  
 145 150 155 160

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

Ser Phe Leu Ile Leu Gly Gly Leu Leu Leu Asn Cys Cys Val Ala Gly  
 180 185 190

Ala Leu Met Arg Pro Ile Gly Pro Lys Pro Thr Lys Ala Gly Lys Asp  
 195 200 205  
 Lys Ser Lys Ala Ser Leu Glu Lys Ala Gly Lys Ser Gly Val Lys Lys  
 210 215 220  
 Asp Leu His Asp Ala Asn Thr Asp Leu Ile Gly Arg His Pro Lys Gln  
 225 230 235 240  
 Glu Lys Arg Ser Val Phe Gln Thr Ile Asn Gln Phe Leu Asp Leu Thr  
 245 250 255  
 Leu Phe Thr His Arg Gly Phe Leu Leu Tyr Leu Ser Gly Asn Val Ile  
 260 265 270  
 Met Phe Phe Gly Leu Phe Ala Pro Leu Val Phe Leu Ser Ser Tyr Gly  
 275 280 285  
 Lys Ser Gln His Tyr Ser Ser Glu Lys Ser Ala Phe Leu Leu Ser Ile  
 290 295 300  
 Leu Ala Phe Val Asp Met Val Ala Arg Pro Ser Met Gly Leu Val Ala  
 305 310 315 320  
 Asn Thr Lys Pro Ile Arg Pro Arg Ile Gln Tyr Phe Phe Ala Ala Ser  
 325 330 335  
 Val Val Ala Asn Gly Val Cys His Met Leu Ala Pro Leu Ser Thr Thr  
 340 345 350  
 Tyr Val Gly Phe Cys Val Tyr Ala Gly Phe Phe Gly Phe Ala Phe Gly  
 355 360 365  
 Trp Leu Ser Ser Val Leu Phe Glu Thr Leu Met Asp Leu Val Gly Pro  
 370 375 380  
 Gln Arg Phe Ser Ser Ala Val Gly Leu Val Thr Ile Val Glu Cys Cys  
 385 390 395 400  
 Pro Val Leu Leu Gly Pro Pro Leu Leu Gly Arg Leu Asn Asp Met Tyr  
 405 410 415  
 Gly Asp Tyr Lys Tyr Thr Tyr Trp Ala Cys Gly Val Val Leu Ile Ile  
 420 425 430  
 Ser Gly Ile Tyr Leu Phe Ile Gly Met Gly Ile Asn Tyr Arg Leu Leu  
 435 440 445  
 Ala Lys Glu Gln Lys Ala Asn Glu Gln Lys Lys Glu Ser Lys Glu Glu  
 450 455 460

Glu Thr Ser Ile Asp Val Ala Gly Lys Pro Asn Glu Val Thr Lys Ala  
 465 470 475 480

Ala Glu Ser Pro Asp Gln Lys Asp Thr Asp Gly Gly Pro Lys Glu Glu  
 485 490 495

Glu Ser Pro Val  
 500

<210> 2  
 <211> 1503  
 <212> DNA  
 <213> Homo Sapiens

<400> 2  
 atgccaccag cagttggagg tccagttgga tacaccccc cagatggagg ctggggctgg 60  
 gcagtggttaa ttggagcttt catttccatc ggcttctctt atgcatttcc caaatcaatt 120  
 actgtcttct tcaaagagat tgaaggtata ttccatgcca ccaccagcga agtgtcatgg 180  
 atatcctcca taatgttggc tgtcatgtat ggtggaggtc ctatcagcag tatcctgggtg 240  
 aataaatatg gaagtcgtat agtcatgatt gttggtggct gcttgtcagg ctgtggcttg 300  
 attgcagctt ctttctgtaa caccgtacag caactatacg tctgtattgg agtcattgga 360  
 ggtcttgggc ttgccttcaa cttgaatcca gctctgacca tgattggcaa gtatttctac 420  
 aagaggcgac cattggccaa cggactggcc atggcaggca gccctgtgtt cctctgtact 480  
 ctggcccccc tcaatcaggt tttcttcggt atctttggat ggagagggaag ctttctaatt 540  
 cttgggggct tgctactaaa ctgctgtgtt gctggagccc tcatgcgacc aatcgggccc 600  
 aagccaacca aggcaggga agataagtct aaagcatccc ttgagaaagc tggaaaatct 660  
 ggtgtgaaaa aagatctgca tgatgcaa atacagatctta ttggaagaca ccctaaacaa 720  
 gagaaacgat cagtcttcca aacaattaat cagttcctgg acttaaccct attcaccac 780  
 agaggctttt tgctatacct ctctggaaat gtgatcatgt tttttggact ctttgcacct 840  
 ttggtgttct ttagtagtta tgggaagagt cagcattatt ctagtgagaa gtctgccttc 900  
 cttctttcca ttctggcttt tgttgacatg gtagcccgac catctatggg actttagacc 960  
 aacacaaagc caataagacc tcgaattcag tatttctttg cggcttccgt tgttgcaa at 1020  
 ggagtgtgtc atatgctagc acctttatcc actacctatg ttggattctg tgtctatgcg 1080  
 ggattctttg gatttgcctt cgggtggctc agctccgtat tgtttgaaac attgatggac 1140  
 cttgttggac ccagagggtt ctccagcgct gtgggattgg tgaccattgt ggaatgctgt 1200  
 cctgtcctcc tggggccacc acttttaggt cggctcaatg acatgtatgg agactacaaa 1260  
 tacacatact gggcatgtgg cgtcgtccta attatttcag gtatctatct cttcattggc 1320  
 atgggcatca attatcgact tttggcaaaa gaacagaaag caaacgagca gaaaaaggaa 1380  
 agtaaagagg aagagaccag tatagatgtt gctgggaagc caaatgaagt taccaaagca 1440  
 gcagaatctc cggaccagaa agacacagat ggagggccca aggaggagga aagtccagtc 1500  
 tga 1503

<210> 3  
 <211> 478  
 <212> PRT  
 <213> Homo Sapiens

<400> 3

Met Pro Pro Met Pro Ser Ala Pro Pro Val His Pro Pro Pro Asp Gly  
 1 5 10 15

Gly Trp Gly Trp Ile Val Val Gly Ala Ala Phe Ile Ser Ile Gly Phe  
 20 25 30

Ser Tyr Ala Phe Pro Lys Ala Val Thr Val Phe Phe Lys Glu Ile Gln  
 35 40 45

Gln Ile Phe His Thr Thr Tyr Ser Glu Ile Ala Trp Ile Ser Ser Ile  
 50 55 60

Met Leu Ala Val Met Tyr Ala Gly Gly Pro Val Ser Ser Val Leu Val  
 65 70 75 80

Asn Lys Tyr Gly Ser Arg Pro Val Val Ile Ala Gly Gly Leu Leu Cys  
 85 90 95

Cys Leu Gly Met Val Leu Ala Ser Phe Ser Ser Ser Val Val Gln Leu  
 100 105 110

Tyr Leu Thr Met Gly Phe Ile Thr Gly Leu Gly Leu Ala Phe Asn Leu  
 115 120 125

Gln Pro Ala Leu Thr Ile Ile Gly Lys Tyr Phe Tyr Arg Lys Arg Pro  
 130 135 140

Met Ala Asn Gly Leu Ala Met Ala Gly Ser Pro Val Phe Leu Ser Ser  
 145 150 155 160

Leu Ala Pro Phe Asn Gln Tyr Leu Phe Asn Thr Phe Gly Trp Lys Gly  
 165 170 175

Ser Phe Leu Ile Leu Gly Ser Leu Leu Leu Asn Ala Cys Val Ala Gly  
 180 185 190

Ser Leu Met Arg Pro Leu Gly Pro Asn Gln Thr Thr Ser Lys Ser Lys  
 195 200 205

Asn Lys Thr Gly Lys Thr Glu Asp Asp Ser Ser Pro Lys Lys Ile Lys  
 210 215 220

Thr Lys Lys Ser Thr Trp Glu Lys Val Asn Lys Tyr Leu Asp Phe Ser  
 225 230 235 240

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

<210> 4  
 <211> 1437  
 <212> DNA  
 <213> Homo Sapiens

<400> 4  
 atgccaccaa tgccaagtgc cccacctgtg catccacctc cagatggagg atgggggttg 60  
 attgtggttg gagcagcttt tatctccatt ggattttcct atgcattccc caaagctgtc 120  
 accgtattct tcaaagaaat tcagcaaata ttccacacta cctacagtga aatagcatgg 180  
 atttcatcca ttatgctggc tgttatgtac gcaggaggtc ctgtaagtag tgttttggtg 240  
 aataaatacg gcagccggcc ggtggtgata gcaggaggct tattatgctg tcttggaaatg 300  
 gtgttggcct cctttagtag cagcgtggta cagctgtacc tcactatggg attcattaca 360  
 ggtttaggtt tagccttcaa cctgcaaccc gccttaacca taattggcaa atacttctat 420  
 aggaagcgac ccatggcaaa tggattggcc atggcaggaa gtctgtttt cttaagttca 480  
 ttggctcctt tcaatcagta cttttttaat acttttggct ggaaaggaag cttcctgatt 540  
 ttgggaagtc tacttttgaa tgctgtgtg gctggttccc tcatgagacc cttggaccc 600  
 aatcaaacca cttctaagtc taaaaataag actggcaaaa cagaagatga ttcaagccca 660  
 aagaaaatca aaacgaagaa atcaacttgg gaaaaagtta ataagtattt agatttctcc 720  
 ctttttaagc atagaggatt tctgatatat ctgtctggaa atgtcattat gttcctaggt 780  
 ttttttggcc ccattatatt cttggctcca tatgctaaag accaaggaat tgatgagtac 840  
 tcggcagctt ttctgctatc tgttatggct ttggttgata tgtttgctag gccttctgta 900  
 ggattaattg caaactccaa atatattcga cctcgaattc agtacttctt cagttttgca 960  
 atcatgttca atggagtgtg tcacctcttg tgcccactgg cacaggacta cacaagcctg 1020  
 gtattatatg ctgtattttt tggccttgga tttgggagtg ttagcagtgt tctctttgaa 1080  
 actctcatgg acctcgtggg tgcaccaaga ttttccagtg ccgtcggact tgtcacaatt 1140  
 gtggagtgtg gccagttct tcttggccct cctcttgca gtaaatggg ggatttaact 1200  
 ggagaatata aatacatgta catgtcctgt ggggctattg tggtagcagc aagcgtgtgg 1260  
 ctgctcattg gcaatgctat caactataga ttgcttgcaa aggaaaggaa ggaggaaaat 1320  
 gcaaggcaga agaccagaga atctgaaccc ttgagcaaat ctaaaccattc ggaagatgtt 1380  
 aacgtcaaag tttcaaatgc acagagtgtg acctcagaaa gagaaactaa catttaa 1437

<210> 5  
 <211> 504  
 <212> PRT  
 <213> Homo Sapiens

<400> 5

Met Gly Ala Gly Gly Pro Arg Arg Gly Glu Gly Pro Pro Asp Gly Gly  
 1 5 10 15

Trp Gly Trp Val Val Leu Gly Ala Cys Phe Val Val Thr Gly Phe Ala  
 20 25 30

Tyr Gly Phe Pro Lys Ala Val Ser Val Phe Phe Arg Ala Leu Met Arg  
 35 40 45  
 Asp Phe Asp Ala Gly Tyr Ser Asp Thr Ala Trp Val Ser Ser Ile Met  
 50 55 60  
 Leu Ala Met Leu Tyr Gly Thr Gly Pro Val Ser Ser Ile Leu Val Thr  
 65 70 75 80  
 Arg Phe Gly Cys Arg Pro Val Met Leu Ala Gly Gly Leu Leu Ala Ser  
 85 90 95  
 Ala Gly Met Ile Leu Ala Ser Phe Ala Thr Arg Leu Leu Glu Leu Tyr  
 100 105 110  
 Leu Thr Ala Gly Val Leu Thr Gly Leu Gly Leu Ala Leu Asn Phe Gln  
 115 120 125  
 Pro Ser Leu Ile Met Leu Gly Leu Tyr Phe Glu Arg Arg Arg Pro Leu  
 130 135 140  
 Ala Asn Gly Leu Ala Ala Ala Gly Ser Pro Val Phe Leu Ser Ala Leu  
 145 150 155 160  
 Ser Pro Leu Gly Gln Gln Leu Leu Glu Arg Phe Gly Trp Arg Gly Gly  
 165 170 175  
 Phe Leu Leu Leu Gly Gly Leu Leu Leu His Cys Cys Ala Cys Gly Ala  
 180 185 190  
 Val Met Arg Pro Pro Pro Gly Pro Gly Pro Arg Pro Arg Arg Asp Ser  
 195 200 205  
 Ala Gly Asp Arg Ala Gly Asp Ala Pro Gly Glu Ala Glu Ala Asp Gly  
 210 215 220  
 Ala Gly Leu Gln Leu Arg Glu Ala Ser Pro Arg Val Arg Pro Arg Arg  
 225 230 235 240  
 Arg Leu Leu Asp Leu Ala Val Cys Thr Asp Arg Ala Phe Ala Val Tyr  
 245 250 255  
 Ala Val Thr Lys Phe Leu Met Ala Leu Gly Leu Phe Val Pro Ala Ile  
 260 265 270  
 Leu Leu Val Asn Tyr Ala Lys Asp Ala Gly Val Pro Asp Thr Asp Ala  
 275 280 285  
 Ala Phe Leu Leu Ser Ile Val Gly Phe Val Asp Ile Val Ala Arg Pro  
 290 295 300

Ala Cys Gly Ala Leu Ala Gly Leu Ala Arg Leu Arg Pro His Val Pro  
305 310 315 320

Tyr Leu Phe Ser Leu Ala Leu Leu Ala Asn Gly Leu Thr Asp Leu Ser  
325 330 335

Ser Ala Arg Ala Arg Ser Tyr Gly Ala Leu Val Ala Phe Cys Val Ala  
340 345 350

Phe Gly Leu Ser Tyr Gly Met Val Gly Ala Leu Gln Phe Glu Val Leu  
355 360 365

Met Ala Ala Val Gly Ala Pro Arg Phe Pro Ser Ala Leu Gly Leu Val  
370 375 380

Leu Leu Val Glu Ala Ala Ala Val Leu Ile Gly Pro Pro Ser Ala Gly  
385 390 395 400

Arg Leu Val Asp Val Leu Lys Asn Tyr Glu Ile Ile Phe Tyr Leu Ala  
405 410 415

Gly Ser Glu Val Ala Leu Ala Gly Val Phe Met Ala Val Ala Thr Asn  
420 425 430

Cys Cys Leu Arg Cys Ala Lys Ala Ala Pro Ser Gly Pro Gly Thr Glu  
435 440 445

Gly Gly Ala Ser Asp Thr Glu Asp Ala Glu Ala Glu Gly Asp Ser Glu  
450 455 460

Pro Leu Pro Val Val Ala Glu Glu Pro Gly Asn Leu Glu Ala Leu Glu  
465 470 475 480

Val Leu Ser Ala Arg Gly Glu Pro Thr Glu Pro Glu Ile Glu Ala Arg  
485 490 495

Pro Arg Leu Ala Ala Glu Ser Val  
500

<210> 6  
<211> 1515  
<212> DNA  
<213> Homo Sapiens

<400> 6  
atggggcgctg gcgggccccg gcggggcgag ggccccccag acggcggtg gggctgggtg 60  
gtgctgggcg cctgctttgt ggtcaccggc ttgcctacg gcttcccaa agccgtgagc 120  
gtcttcttcc gcgcgctcat gcgcgacttc gacgccggt acagcgacac ggcctgggtg 180  
tcctccatca tgctagccat gctctacggc acggggccccg tgtccagcat cctcgtgacc 240  
cgctttgggt gtcgcccggg gatgctggcg ggtgggctgc tggttccgc gggcatgatc 300



ctagcttctt ttgccacgcg cctcctggag ctctacctga ccgctgggggt gctcacaggg 360  
 ctggggcctgg ccctcaactt ccagccgtcg ctcatcatgc tggggctgta cttcgagcgg 420  
 cggcggcctc tggccaacgg gctggcgcg gcgggcagcc ccgtgttctt gtccgcgctg 480  
 tcgccgctcg gccagcagct gctggagcgc ttcggtctggc gcggcggtt cctgctgctc 540  
 ggggggctcc tgctgactg ctgcgcctgc ggggctgtca tgaggccgcc gcccgggccc 600  
 gggccgcgac cgcgcaggga cagcgccggc gaccgcgcgg gggacgctcc gggcgaggcg 660  
 gaggtgacg gtgcggggct gcagctgcgc gaggcacccc ccagggtccg gcccgcgcgg 720  
 cgcctgctgg acttggcagt gtgcaccgac cgcgccttcg ccgtgtacgc cgtcaccaag 780  
 ttctgatgg cgctcgggct cttcgtcccc gccatcctgc tggagaacta cgccaaggac 840  
 gcgggcgtgc ccgacaccga cgcgccttc ctgctgtcca tcgtgggctt cgtggacatc 900  
 gtggcgcgcc cggcgtgcgg cgcctggcg ggctggcgc gtctgcggcc gcacgtcccg 960  
 tatctgttca gcttgccct gctggccaat gggctcacag acctgagcag cgcacgcgcg 1020  
 cgctcctacg gcgccctcgt cgccttctgc gtgccttcg gcctctccta cggcatgggtg 1080  
 ggcgcgctgc agttcgaggt gctcatggcg gctgtggcg cgccccgctt cccagtgcg 1140  
 ctgggcctgg tgttgctcgt ggaggccgg gctgtgtca tcggaccgcc ctctgccggc 1200  
 cgcctggtgg atgtgttgaa gaactatgag atcatcttct acctggccgg ctctgaggtg 1260  
 gccctggctg gggctctcat ggctgtcgcc accaactgct gcctgcgttg tgctaaagct 1320  
 gcccgcagc gcccaggcac tgaggcgga gccagtgaca ctgaggacgc tgaggctgaa 1380  
 ggggactctg agcccctgcc tgttgttgca gaggaacccg gcaacctgga ggccctggag 1440  
 gtgctcagcg cccggggcga gccacagaa ccagaaatag aggcgaggcc gaggtggct 1500  
 gccgagtctg tataa 1515

<210> 7  
 <211> 465  
 <212> PRT  
 <213> Homo Sapiens

<400> 7

Met Gly Gly Ala Val Val Asp Glu Gly Pro Thr Gly Val Lys Ala Pro  
1 5 10 15

Asp Gly Gly Trp Gly Trp Ala Val Leu Phe Gly Cys Phe Val Ile Thr  
20 25 30

Gly Phe Ser Tyr Ala Phe Pro Lys Ala Val Ser Val Phe Phe Lys Glu  
35 40 45

Leu Ile Gln Glu Phe Gly Ile Gly Tyr Ser Asp Thr Ala Trp Ile Ser  
50 55 60

Ser Ile Leu Leu Ala Met Leu Tyr Gly Thr Gly Pro Leu Cys Ser Val  
65 70 75 80

Cys Val Asn Arg Phe Gly Cys Arg Pro Val Met Leu Val Gly Gly Leu  
 85 90 95  
 Phe Ala Ser Leu Gly Met Val Ala Ala Ser Phe Cys Arg Ser Ile Ile  
 100 105 110  
 Gln Val Tyr Leu Thr Thr Gly Val Ile Thr Gly Leu Gly Leu Ala Leu  
 115 120 125  
 Asn Phe Gln Pro Ser Leu Ile Met Leu Asn Arg Tyr Phe Ser Lys Arg  
 130 135 140  
 Arg Pro Met Ala Asn Gly Leu Ala Ala Ala Gly Ser Pro Val Phe Leu  
 145 150 155 160  
 Cys Ala Leu Ser Pro Leu Gly Gln Leu Leu Gln Asp Arg Tyr Gly Trp  
 165 170 175  
 Arg Gly Gly Phe Leu Ile Leu Gly Gly Leu Leu Leu Asn Cys Cys Val  
 180 185 190  
 Cys Ala Ala Leu Met Arg Pro Leu Val Val Thr Ala Gln Pro Gly Ser  
 195 200 205  
 Gly Pro Pro Arg Pro Ser Arg Arg Leu Leu Asp Leu Ser Val Phe Arg  
 210 215 220  
 Asp Arg Gly Phe Val Leu Tyr Ala Val Ala Ala Ser Val Met Val Leu  
 225 230 235 240  
 Gly Leu Phe Val Pro Pro Val Phe Val Val Ser Tyr Ala Lys Asp Leu  
 245 250 255  
 Gly Val Pro Asp Thr Lys Ala Ala Phe Leu Leu Thr Ile Leu Gly Phe  
 260 265 270  
 Ile Asp Ile Phe Ala Arg Pro Ala Ala Gly Phe Val Ala Gly Leu Gly  
 275 280 285  
 Lys Val Arg Pro Tyr Ser Val Tyr Leu Phe Ser Phe Ser Met Phe Phe  
 290 295 300  
 Asn Gly Leu Ala Asp Leu Ala Gly Ser Thr Ala Gly Asp Tyr Gly Gly  
 305 310 315 320  
 Leu Val Val Phe Cys Ile Phe Phe Gly Ile Ser Tyr Gly Met Val Gly  
 325 330 335  
 Ala Leu Gln Phe Glu Val Leu Met Ala Ile Val Gly Thr His Lys Phe  
 340 345 350

Ser Ser Ala Ile Gly Leu Val Leu Leu Met Glu Ala Val Ala Val Leu  
355 360 365

Val Gly Pro Pro Ser Gly Gly Lys Leu Leu Asp Ala Thr His Val Tyr  
370 375 380

Met Tyr Val Phe Ile Leu Ala Gly Ala Glu Val Leu Thr Ser Ser Leu  
385 390 395 400

Ile Leu Leu Leu Gly Asn Phe Phe Cys Ile Arg Lys Lys Pro Lys Glu  
405 410 415

Pro Gln Pro Glu Val Ala Ala Ala Glu Glu Glu Lys Leu His Lys Pro  
420 425 430

Pro Ala Asp Ser Gly Val Asp Leu Arg Glu Val Glu His Phe Leu Lys  
435 440 445

Ala Glu Pro Glu Lys Asn Gly Glu Val Val His Thr Pro Glu Thr Ser  
450 455 460

Val  
465

<210> 8  
<211> 1398  
<212> DNA  
<213> Homo Sapiens

<400> 8  
atgggagggg ccgtggtgga cgagggcccc acaggcgtca aggccctga cggcggctgg 60  
ggctgggccg tgctcttcgg ctgtttcgtc atcactggct tctcctacgc cttccccaag 120  
gccgtcagtg tcttcttcaa ggagctcata caggagtttg ggatcggcta cagcgacaca 180  
gcctggatct cctccatcct gctggccatg ctctacggga caggctccgct ctgcagtgtg 240  
tgcgtagaac gctttggctg ccggcccgtc atgcttgtgg ggggtctctt tgcgtcgtg 300  
ggcatggttg ctgcgtcctt ttgccggagc atcatccagg tctacctcac cactggggtc 360  
atcacggggt tgggtttggc actcaacttc cagccctcgc tcatcatgct gaaccgctac 420  
ttcagcaagc ggcgccccat ggccaacggg ctggcggcag caggtagccc tgtcttcctg 480  
tgtgccctga gcccgctggg gcagctgctg caggaccgct acggctggcg gggcggttc 540  
ctcatccttg gcggcctgct gctcaactgc tgcgtgtgtg ccgcactcat gaggccccctg 600  
gtggtcacgg ccagccggg ctcggggccc ccgcgaccct cccggcgccct gctagacctg 660  
agcgtcttcc gggaccgcgg ctttgtgctt tacgccgtgg ccgcctcggc catggtgctg 720  
gggctcttcg tcccgcccgt gttcgtggtg agctaccca aggacctggg cgtgcccgc 780  
accaaggccg ctttcctgct caccatcctg ggcttcattg acatcttcgc gcggccggcc 840

gcgggcttcg tggcggggct tgggaagggtg cgccctact ccgtctacct cttcagcttc	900
tccatgttct tcaacggcct cgcggaacctg gcgggctcta cggcgggcga ctacggcggc	960
ctcgtggtct tctgcatctt ctttggcatc tcctacggca tggtaggggc cctgcagttc	1020
gaggtgctca tggccatcgt gggcaccac aagttctcca gtgccattgg cctggtgctg	1080
ctgatggagg cggtagccgt gctcgtcggg ccccttcgg gaggcaaact cctggatgcg	1140
accacgtct acatgtacgt gttcatcctg gcgggggcg aggtgctcac ctctccctg	1200
atcttgctgc tgggcaactt cttctgcatt aggaagaagc ccaaagagcc acagcctgag	1260
gtggcgccg cgaggagga gaagctccac aagcctcctg cagactcggg ggtggacttg	1320
cgggaggtgg agcatttcct gaaggctgag cctgagaaa acggggaggt ggttcacacc	1380
ccgaaacaa gtgtctga	1398