

PhoenixTemp64419.tmp.txt  
SEQUENCE LISTING

<110> Atlas Antibodies

<120> Uses of HMGCR protein

<130> 21036491

<160> 4

<170> PatentIn version 3.3

<210> 1

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1

Met Ala Gly Ser Ile Gly Gly Tyr Asn Ala His Ala Ala Asn Ile Val  
1 5 10 15

Thr Ala Ile Tyr Ile Ala Cys Gly Gln Asp Ala Ala Gln Asn Val Gly  
20 25 30

Ser Ser Asn Cys Ile Thr Leu Met Glu Ala Ser Gly Pro Thr Asn Glu  
35 40 45

Asp Leu Tyr Ile Ser Cys Thr Met Pro Ser Ile Glu Ile Gly Thr Val  
50 55 60

Gly Gly Gly Thr Asn Leu Leu Pro Gln Gln Ala Cys Leu Gln Met Leu  
65 70 75 80

Gly Val Gln Gly Ala Cys Lys Asp Asn Pro Gly Glu Asn Ala Arg Gln  
85 90 95

Leu Ala Arg Ile Val Cys Gly Thr Val Met Ala Gly Glu Leu Ser Leu  
100 105 110

Met Ala Ala Leu Ala Ala Gly His Leu Val Lys Ser His Met Ile His  
115 120 125

Asn Arg Ser Lys Ile Asn Leu Gln Asp Leu Gln Gly  
130 135 140

<210> 2

<211> 888

<212> PRT

<213> Homo sapiens

<400> 2

Met Leu Ser Arg Leu Phe Arg Met His Gly Leu Phe Val Ala Ser His  
1 5 10 15

Pro Trp Glu Val Ile Val Gly Thr Val Thr Leu Thr Ile Cys Met Met  
20 25 30

PhoenixTemp64419.tmp.txt

Ser Met Asn Met Phe Thr Gly Asn Asn Lys Ile Cys Gly Trp Asn Tyr  
35 40 45

Glu Cys Pro Lys Phe Glu Glu Asp Val Leu Ser Ser Asp Ile Ile Ile  
50 55 60

Leu Thr Ile Thr Arg Cys Ile Ala Ile Leu Tyr Ile Tyr Phe Gln Phe  
65 70 75 80

Gln Asn Leu Arg Gln Leu Gly Ser Lys Tyr Ile Leu Gly Ile Ala Gly  
85 90 95

Leu Phe Thr Ile Phe Ser Ser Phe Val Phe Ser Thr Val Val Ile His  
100 105 110

Phe Leu Asp Lys Glu Leu Thr Gly Leu Asn Glu Ala Leu Pro Phe Phe  
115 120 125

Leu Leu Leu Ile Asp Leu Ser Arg Ala Ser Thr Leu Ala Lys Phe Ala  
130 135 140

Leu Ser Ser Asn Ser Gln Asp Glu Val Arg Glu Asn Ile Ala Arg Gly  
145 150 155 160

Met Ala Ile Leu Gly Pro Thr Phe Thr Leu Asp Ala Leu Val Glu Cys  
165 170 175

Leu Val Ile Gly Val Gly Thr Met Ser Gly Val Arg Gln Leu Glu Ile  
180 185 190

Met Cys Cys Phe Gly Cys Met Ser Val Leu Ala Asn Tyr Phe Val Phe  
195 200 205

Met Thr Phe Phe Pro Ala Cys Val Ser Leu Val Leu Glu Leu Ser Arg  
210 215 220

Glu Ser Arg Glu Gly Arg Pro Ile Trp Gln Leu Ser His Phe Ala Arg  
225 230 235 240

Val Leu Glu Glu Glu Glu Asn Lys Pro Asn Pro Val Thr Gln Arg Val  
245 250 255

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

Trp Ile Ala Asp Pro Ser Pro Gln Asn Ser Thr Ala Asp Thr Ser Lys  
275 280 285

Val Ser Leu Gly Leu Asp Glu Asn Val Ser Lys Arg Ile Glu Pro Ser  
290 295 300

## PhoenixTemp64419.tmp.txt

Val Ser Leu Trp Gln Phe Tyr Leu Ser Lys Met Ile Ser Met Asp Ile  
305 310 315 320

Glu Gln Val Ile Thr Leu Ser Leu Ala Leu Leu Ala Val Lys Tyr  
325 330 335

Ile Phe Phe Glu Gln Thr Glu Thr Glu Ser Thr Leu Ser Leu Lys Asn  
340 345 350

Pro Ile Thr Ser Pro Val Val Thr Gln Lys Lys Val Pro Asp Asn Cys  
355 360 365

Cys Arg Arg Glu Pro Met Leu Val Arg Asn Asn Gln Lys Cys Asp Ser  
370 375 380

Val Glu Glu Glu Thr Gly Ile Asn Arg Glu Arg Lys Val Glu Val Ile  
385 390 395 400

Lys Pro Leu Val Ala Glu Thr Asp Thr Pro Asn Arg Ala Thr Phe Val  
405 410 415

Val Gly Asn Ser Ser Leu Leu Asp Thr Ser Ser Val Leu Val Thr Gln  
420 425 430

Glu Pro Glu Ile Glu Leu Pro Arg Glu Pro Arg Pro Asn Glu Glu Cys  
435 440 445

Leu Gln Ile Leu Gly Asn Ala Glu Lys Gly Ala Lys Phe Leu Ser Asp  
450 455 460

Ala Glu Ile Ile Gln Leu Val Asn Ala Lys His Ile Pro Ala Tyr Lys  
465 470 475 480

Leu Glu Thr Leu Met Glu Thr His Glu Arg Gly Val Ser Ile Arg Arg  
485 490 495

Gln Leu Leu Ser Lys Lys Leu Ser Glu Pro Ser Ser Leu Gln Tyr Leu  
500 505 510

Pro Tyr Arg Asp Tyr Asn Tyr Ser Leu Val Met Gly Ala Cys Cys Glu  
515 520 525

Asn Val Ile Gly Tyr Met Pro Ile Pro Val Gly Val Ala Gly Pro Leu  
530 535 540

Cys Leu Asp Glu Lys Glu Phe Gln Val Pro Met Ala Thr Thr Glu Gly  
545 550 555 560

Cys Leu Val Ala Ser Thr Asn Arg Gly Cys Arg Ala Ile Gly Leu Gly  
565 570 575

Gly Gly Ala Ser Ser Arg Val Leu Ala Asp Gly Met Thr Arg Gly Pro  
Page 3

580

585

590

Val Val Arg Leu Pro Arg Ala Cys Asp Ser Ala Glu Val Lys Ala Trp  
595 600 605

Leu Glu Thr Ser Glu Gly Phe Ala Val Ile Lys Glu Ala Phe Asp Ser  
610 615 620

Thr Ser Arg Phe Ala Arg Leu Gln Lys Leu His Thr Ser Ile Ala Gly  
625 630 635 640

Arg Asn Leu Tyr Ile Arg Phe Gln Ser Arg Ser Gly Asp Ala Met Gly  
645 650 655

Met Asn Met Ile Ser Lys Gly Thr Glu Lys Ala Leu Ser Lys Leu His  
660 665 670

Glu Tyr Phe Pro Glu Met Gln Ile Leu Ala Val Ser Gly Asn Tyr Cys  
675 680 685

Thr Asp Lys Lys Pro Ala Ala Ile Asn Trp Ile Glu Gly Arg Gly Lys  
690 695 700

Ser Val Val Cys Glu Ala Val Ile Pro Ala Lys Val Val Arg Glu Val  
705 710 715 720

Leu Lys Thr Thr Thr Glu Ala Met Ile Glu Val Asn Ile Asn Lys Asn  
725 730 735

Leu Val Gly Ser Ala Met Ala Gly Ser Ile Gly Gly Tyr Asn Ala His  
740 745 750

Ala Ala Asn Ile Val Thr Ala Ile Tyr Ile Ala Cys Gly Gln Asp Ala  
755 760 765

Ala Gln Asn Val Gly Ser Ser Asn Cys Ile Thr Leu Met Glu Ala Ser  
770 775 780

Gly Pro Thr Asn Glu Asp Leu Tyr Ile Ser Cys Thr Met Pro Ser Ile  
785 790 795 800

Glu Ile Gly Thr Val Gly Gly Gly Thr Asn Leu Leu Pro Gln Gln Ala  
805 810 815

Cys Leu Gln Met Leu Gly Val Gln Gly Ala Cys Lys Asp Asn Pro Gly  
820 825 830

Glu Asn Ala Arg Gln Leu Ala Arg Ile Val Cys Gly Thr Val Met Ala  
835 840 845

Gly Glu Leu Ser Leu Met Ala Ala Leu Ala Ala Gly His Leu Val Lys  
850 855 860

PhoenixTemp64419.tmp.txt

Ser His Met Ile His Asn Arg Ser Lys Ile Asn Leu Gln Asp Leu Gln  
865 870 875 880

Gly Ala Cys Thr Lys Lys Thr Ala  
885

<210> 3  
<211> 4475  
<212> DNA  
<213> Homo sapiens

<400> 3  
ttcgggtggcc tctagtgaga tctggaggat ccaaggattc tgtagctaca atgttggtcaa 60  
gacttttttcg aatgcatggc ctctttgtgg cctcccatcc ctgggaagtc atagtgggga 120  
cagtgcact gaccatctgc atgatgtcca tgaacatgtt tactggtaac aataagatct 180  
gtggttgga ttatgaatgt ccaagtttg aagaggatgt tttgagcagt gacattataa 240  
ttctgacaat aacacgatgc atagccatcc tgtatatatta cttccagttc cagaatttac 300  
gtcaacttgg atcaaaatat attttgggta ttgctggcct tttcacaatt ttctcaagtt 360  
ttgtattcag tacagttgtc attcacttct tagacaaaga attgacaggc ttgaatgaag 420  
ctttgccctt tttctactt ttgattgacc tttccagagc aagcacatta gcaaagtttg 480  
ccctcagttc caactcacag gatgaagtaa gggaaaatat tgctcgaggga atggcaattt 540  
taggtcctac gtttaccctc gatgctcttg ttgaatgtct tgtgattgga gttggtacca 600  
tgtcaggggt acgtcagctt gaaattatgt gctgcttttg ctgcatgtca gttcttgcca 660  
actacttcgt gttcatgact ttcttcccag cttgtgtgtc cttggtatta gagctttctc 720  
gggaaagccg cgaggggtcgt ccaatttggc agctcagcca ttttgcccga gttttagaag 780  
aagaagaaaa taagccgaat cctgtaactc agagggtcaa gatgattatg tctctaggct 840  
tggttcttgt tcatgctcac agtcgctgga tagctgatcc ttctcctcaa aacagtacag 900  
cagatacttc taagggttca ttaggactgg atgaaaatgt gtccaagaga attgaaccaa 960  
gtgtttccct ctggcagttt tatctctcta aaatgatcag catggatatt gaacaagtta 1020  
ttaccctaag tttagctctc cttctggctg tcaagtacat cttctttgaa caaacagaga 1080  
cagaatctac actctcatta aaaaacccta tcacatctcc tgtagtgaca caaaagaaag 1140  
tcccagacaa ttgttgtaga cgtgaaccta tgctggtcag aaataaccag aaatgtgatt 1200  
cagtagagga agagacaggg ataaaccgag aaagaaaagt tgagggtata aaacccttag 1260  
tggtgaaac agatacccca aacagagcta ctttgtggt tggttaactcc tccttactcg 1320  
atacttcac agtactggtg acacaggaac ctgaaattga acttcccagg gaacctcggc 1380  
ctaatgaaga atgtctacag atacttggga atgcagagaa aggtgcaaaa ttccttagtg 1440  
atgctgagat catccagtta gtcaatgcta agcatatccc agcctacaag ttggaaactc 1500  
tgatggaaac tcatgagcgt ggtgtatcta ttcgccgaca gttactttcc aagaagcttt 1560  
cagaaccttc ttctctccag tacctacctt acagggatta taattactcc ttggtgatgg 1620

## PhoenixTemp64419.tmp.txt

gagcttgttg	tgagaatgtt	attggatata	tgcccatccc	tgttggagtg	gcaggacccc	1680
tttgcttaga	tgaaaaagaa	tttcagggttc	caatggcaac	aacagaaggt	tgtcttgtgg	1740
ccagcaccaa	tagaggctgc	agagcaatag	gtcttggtgg	aggtgccagc	agccgagtcc	1800
ttgcagatgg	gatgactcgt	ggcccagttg	tgcgtcttcc	acgtgcttgt	gactctgcag	1860
aagtgaaagc	ctggctcgaa	acatctgaag	ggttcgcagt	gataaaggag	gcatttgaca	1920
gcactagcag	atttgcacgt	ctacagaaac	ttcatacaag	tatagctgga	cgcaaccttt	1980
atatccgttt	ccagtccagg	tcaggggatg	ccatggggat	gaacatgatt	tcaaagggtta	2040
cagagaaaagc	actttcaaaa	cttcacgagt	atttccctga	aatgcagatt	ctagccgtta	2100
gtggttaacta	ttgtactgac	aagaaacctg	ctgtctataaa	ttggatagag	ggaagaggaa	2160
aatctgttgt	ttgtgaagct	gtcattccag	ccaaggttgt	cagagaagta	ttaaagacta	2220
ccacagaggc	tatgattgag	gtcaacatta	acaagaatth	agtgggctct	gccatggctg	2280
ggagcatagg	aggctacaac	gcccattgcag	caaacattgt	caccgccatc	tacattgcct	2340
gtggacagga	tgcagcacag	aatgttggta	gttcaaactg	tattacttta	atggaagcaa	2400
gtgggtccac	aaatgaagat	ttatatatca	gctgcaccat	gccatctata	gagataggaa	2460
cgggtgggtgg	tgggaccaac	ctactacctc	agcaagcctg	tttgcagatg	ctaggtgttc	2520
aaggagcatg	caaagataat	cctggggaaa	atgcccggca	gcttgcccga	attgtgtgtg	2580
ggaccgtaat	ggctggggaa	ttgtcactta	tggcagcatt	ggcagcagga	catcttgtca	2640
aaagtcacat	gattcacaac	aggtcgaaga	tcaatttaca	agacctcaa	ggagcttgca	2700
ccaagaagac	agcctgaata	gcccagacagt	tctgaactgg	aacatgggca	ttgggttcta	2760
aaggactaac	ataaaatctg	tgaattaaaa	aagctcaatg	cattgtcttg	tggaggatga	2820
atagatgtga	tactgagac	agccacttgg	tttttggtc	tttcagagag	gtctcaggtt	2880
ctttccatgc	agactcctca	gatctgaaca	cagtttagtg	ctttacatgc	tgtgctcttt	2940
gaagagattt	caacaagaat	attgtatgtt	aaagcatcag	agatggtaat	ctacagctca	3000
cctctgaagg	caaataataag	ctgggaaaaa	agttttgatg	aaattcttga	agttcatggg	3060
gatcagtgc	attgaccttc	tccctcactc	ctgccagttg	aaaatggatt	tttaaattat	3120
actgtagctg	atgaaactcc	tgattttgta	gttaatttat	taagtctggg	atgtagaact	3180
tcaagaagta	agagctaagt	tctaagttca	tgtttgtaaa	ttaatacttc	atttggtgct	3240
ggctctatth	gattttgggg	ggtaatcagc	attattcttc	agaaggggac	ctgttttctt	3300
caagggaaga	aacactctta	ttcccaaact	acagaataat	gtgttaaaca	tgctaaatag	3360
ttctatcagg	aaaacaaatc	actgtattta	tctccgcagg	ctatttggtc	agagaggcct	3420
tttgtttaaa	tataaatgtt	taaatataaa	tgtttgtctg	gattggctat	aacatgtctt	3480
tcagcattag	gcttttaaga	aacacagggt	tttgatttct	ttactaaaga	tatcagagct	3540
cttaatgttg	cttagatgag	ggtgactgtc	aagtacaagc	aagactggga	ccttagaaat	3600
cattgtagaa	acacagthtt	gaaagaaaaa	taccatgtct	ctaagccaac	tttaattgct	3660

## PhoenixTemp64419.tmp.txt

```

taaaagacat ttttatttag ttgaaaaatc tagttttttt tgtaaaactgt atcaaactg 3720
tatatgttgt aataaaactt atgctagttt attggaagtg ttcaagaaat aaaaatcaac 3780
ttgtgtactg ataaaatact ctagcctggg ccagagaaga taatgttctt taatgttgtc 3840
caggaaaccc tggcttgctt gccgagccta atgaaaggga aagtcagctt tcagagccag 3900
tgaaggagcc acgtgaatgg ccctagaact gtgcctagtt cctgtggcca ggaggttggt 3960
gactgaaaca ttcacacagg gctctttgat ggaccacga acgctcttag ctttctcagg 4020
gggtcagcag agttattgaa tcttaatttt ttttaatgta caagttttgt ataaataata 4080
aagaactcct tattttgtat tacatctaata gcttcaagtg ttgctcttg aaagctgatg 4140
atgtctcttg tagaagatgg actctgaaaa acattccagg aaaccatggc agcatggaga 4200
gcctcttagt gattgtgtct gcattgttat tgtggaagat ttaccttttc tgttgtacgt 4260
aaagcttaaa ttgcttttgt tgtgactttt tagccagtga ctttttctga gcttttcatg 4320
gaagtggcag tgaaaaatat gttgagtgtt catttttagtg actgtaatta atatcttgct 4380
ggattaatgt tttgtacaat tactaaattg tatacatttt gttatagaat acttttttct 4440
agtttcagta aataatgaaa aggaagttaa tacca 4475

```

```

<210> 4
<211> 14
<212> PRT
<213> Homo sapiens

```

```
<400> 4
```

```

Cys Lys Asp Asn Pro Gly Glu Asn Ala Arg Gln Leu Ala Arg
1           5           10

```