

6655.txt
SEQUENCE LISTING

<110> NATIONAL UNIVERSITY OF SINGAPORE
LIM, YOON-PIN

<120> A PROTIEN INVOLVED IN DETECTION OF CANCER METASTASIS AND A
TREATMENT THEREOF

<130> AY/YF/ak/2012.6655

<150> SG 201106166-0
<151> 2011-08-25

<160> 6

<170> PatentIn version 3.5

<210> 1
<211> 2843
<212> DNA
<213> Homo sapiens

<400> 1

atggcggatt ccagcgaagg cccccgcgcg gggcccgggg aggtggctga gctccccggg	60
gatgagagtg gcaccccagg tggggaggct tttcctctct cctccctggc caatctgttt	120
gagggggagg atggctccct ttcgccctca ccggctgatg ccagtcgccc tgctggccca	180
ggcgatgggc gaccaaactt gcgcataaag ttccagggcg ccttcgcaa gggggtgccc	240
aaccccatcg atctgctgga gtccacccta tatgagtcct cgggtggtgcc tgggcccag	300
aaagcaccca tggactcact gtttgactac ggcacctatc gtcaccactc cagtgacaac	360
aagaggtgga ggaagaagat catagagaag cagccgcaga gcccacaagc tccccccct	420
cagccgcccc ccatcctcaa agtcttcaac cggcccatcc tctttgacat cgtgtcccgg	480
ggctccactg ctgacctgga cgggctgctc ccattcttgc tgaccacaa gaaacgccta	540
actgatgagg agtttcggga accatctacg gggaagacct gcctgcccag ggccttgctg	600
aacctgagca atggccgcaa cgacaccatc cctgtgctgc tggacatcgc ggagcgcacc	660
ggcaacatga gggagtccat taactcgccc ttccgtgaca tctactatcg agggcagaca	720
gccctgcaca tcgccattga gcgtcgctgc aaacactacg tggaaattct cgtggcccag	780
ggagctgatg tccacgcccc ggcccgtggg cgcttcttcc agcccagga tgaggggggc	840
tacttctact ttggggagct gcccctgtcg ctggctgcct gcaccaacca gcccacatt	900
gtcaactacc tgacggagaa cccccacaag aaggcggaca tgcggcgcca ggactcgcga	960
ggcaacacag tgctgcatgc gctggtggcc attgctgaca acaccctga gaacaccaag	1020
tttgttacca agatgtacga cctgctgctg ctcaagtgtg ccgcctctt ccccgacagc	1080
aacctggagg ccgtgctcaa caacgacggc ctctcgcccc tcatgatggc tgccaagacg	1140
ggcaagattg gggcttttca gcacatcatc cggcgggagg tgacggatga ggacacacgg	1200
cacctgtccc gcaagttcaa ggactgggccc tatgggccag tgtattcctc gctttatgac	1260
ctctcctccc tggacacgtg tggggaagag gcctccgtgc tggagatcct ggtgtacaac	1320
agcaagattg agaaccgcca cgagatgctg gctgtggagc ccatcaatga actgctgcgg	1380

6655.txt

gacaagtggc gcaagttcgg ggccgtctcc ttctacatca acgtgggtctc ctacctgtgt 1440
 gccatggtca tcttcactct caccgcctac taccagccgc tggagggcac accgccgtac 1500
 ccttaccgca ccacggtgga ctacctgcgg ctggctggcg aggtcattac gctcttcact 1560
 ggggtcctgt tcttcttcac caacatcaaa gacttggtca tgaagaaatg ccctggagtg 1620
 aattctctct tcattgatgg ctcttccag ctgctctact tcatctactc tgtcctggtg 1680
 atcgtctcag cagccctcta cctggcaggg atcgaggcct acctggccgt gatggctttt 1740
 gccctgggtcc tgggctggat gaatgccctt tacttcaccc gtgggctgaa gctgacgggg 1800
 acctatagca tcatgatcca gaagattctc ttcaaggacc ttttccgatt cctgctcgtc 1860
 tacttgctct tcatgatcgg ctacgcctca gccctggtct ccttcctgaa cccgtgtgcc 1920
 aacatgaagg tgtgcaatga ggaccagacc aactgcacag tgccccactta cccctcgtgc 1980
 cgtgacagcg agaccttcag caccttctc ctggacctgt ttaagctgac catcggcatg 2040
 ggcgacctgg agatgctgag cagcaccaag taccctgtgg tcttcatcat cctgctggtg 2100
 acctacatca tcctcacctt tgtgctgctc ctcaacatgc tcattgccct catgggagcg 2160
 acagtgggcc aggtctccaa ggagagcaag cacatctgga agctgcagtg ggccaccacc 2220
 atcctggaca ttgagcgctc cttccccgta ttctgagga aggccttccg ctctggggag 2280
 atggtcaccg tgggcaagag ctcggacggc actcctgacc gcagggtggtg cttcagggtg 2340
 aatgaggtga actggtctca ctggaaccag aacttgggca tcatcaacga ggaccgggc 2400
 aagaatgaga cctaccagta ttatggcttc tcgcataccg tgggccgcct ccgcagggat 2460
 cgctggctct cggtggtacc ccgcgtggtg gaactgaaca agaactcgaa cccggacgag 2520
 gtggtggtgc ctctggacag catggggaac ccccgctgcg atggccacca gcagggttac 2580
 ccccgcaagt ggaggactga tgacgccccg ctctagggac tgcagcccag cccagcttc 2640
 tctgcccact ctttctagt ccagccgcat ttcagcagtg ctttctgggg tgtccccca 2700
 caccctgctt tggccccaga ggcgagggac cagtggaggt gccagggagg cccagggacc 2760
 ctgtgggtccc ctggctctgc ctccccaccc tggggtgggg gctccccggc acctgtcttg 2820
 ctctatgga gtcacataag cca 2843

<210> 2
 <211> 871
 <212> PRT
 <213> Homo sapiens

<400> 2

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

Glu Leu Pro Gly Asp Glu Ser Gly Thr Pro Gly Gly Glu Ala Phe Pro
 20 25 30

Leu Ser Ser Leu Ala Asn Leu Phe Glu Gly Glu Asp Gly Ser Leu Ser
 Page 2

6655.txt

35

40

45

Pro Ser Pro Ala Asp Ala Ser Arg Pro Ala Gly Pro Gly Asp Gly Arg
50 55 60

Pro Asn Leu Arg Met Lys Phe Gln Gly Ala Phe Arg Lys Gly Val Pro
65 70 75 80

Asn Pro Ile Asp Leu Leu Glu Ser Thr Leu Tyr Glu Ser Ser Val Val
85 90 95

Pro Gly Pro Lys Lys Ala Pro Met Asp Ser Leu Phe Asp Tyr Gly Thr
100 105 110

Tyr Arg His His Ser Ser Asp Asn Lys Arg Trp Arg Lys Lys Ile Ile
115 120 125

Glu Lys Gln Pro Gln Ser Pro Lys Ala Pro Ala Pro Gln Pro Pro Pro
130 135 140

Ile Leu Lys Val Phe Asn Arg Pro Ile Leu Phe Asp Ile Val Ser Arg
145 150 155 160

Gly Ser Thr Ala Asp Leu Asp Gly Leu Leu Pro Phe Leu Leu Thr His
165 170 175

Lys Lys Arg Leu Thr Asp Glu Glu Phe Arg Glu Pro Ser Thr Gly Lys
180 185 190

Thr Cys Leu Pro Lys Ala Leu Leu Asn Leu Ser Asn Gly Arg Asn Asp
195 200 205

Thr Ile Pro Val Leu Leu Asp Ile Ala Glu Arg Thr Gly Asn Met Arg
210 215 220

Glu Phe Ile Asn Ser Pro Phe Arg Asp Ile Tyr Tyr Arg Gly Gln Thr
225 230 235 240

Ala Leu His Ile Ala Ile Glu Arg Arg Cys Lys His Tyr Val Glu Leu
245 250 255

Leu Val Ala Gln Gly Ala Asp Val His Ala Gln Ala Arg Gly Arg Phe
260 265 270

Phe Gln Pro Lys Asp Glu Gly Gly Tyr Phe Tyr Phe Gly Glu Leu Pro
275 280 285

Leu Ser Leu Ala Ala Cys Thr Asn Gln Pro His Ile Val Asn Tyr Leu
290 295 300

Thr Glu Asn Pro His Lys Lys Ala Asp Met Arg Arg Gln Asp Ser Arg
Page 3

305 310 6655.txt 315 320
 Gly Asn Thr Val Leu His Ala Leu Val Ala Ile Ala Asp Asn Thr Arg
 325 330 335
 Glu Asn Thr Lys Phe Val Thr Lys Met Tyr Asp Leu Leu Leu Lys
 340 345 350
 Cys Ala Arg Leu Phe Pro Asp Ser Asn Leu Glu Ala Val Leu Asn Asn
 355 360 365
 Asp Gly Leu Ser Pro Leu Met Met Ala Ala Lys Thr Gly Lys Ile Gly
 370 375 380
 Ile Phe Gln His Ile Ile Arg Arg Glu Val Thr Asp Glu Asp Thr Arg
 385 390 395 400
 His Leu Ser Arg Lys Phe Lys Asp Trp Ala Tyr Gly Pro Val Tyr Ser
 405 410 415
 Ser Leu Tyr Asp Leu Ser Ser Leu Asp Thr Cys Gly Glu Glu Ala Ser
 420 425 430
 Val Leu Glu Ile Leu Val Tyr Asn Ser Lys Ile Glu Asn Arg His Glu
 435 440 445
 Met Leu Ala Val Glu Pro Ile Asn Glu Leu Leu Arg Asp Lys Trp Arg
 450 455 460
 Lys Phe Gly Ala Val Ser Phe Tyr Ile Asn Val Val Ser Tyr Leu Cys
 465 470 475 480
 Ala Met Val Ile Phe Thr Leu Thr Ala Tyr Tyr Gln Pro Leu Glu Gly
 485 490 495
 Thr Pro Pro Tyr Pro Tyr Arg Thr Thr Val Asp Tyr Leu Arg Leu Ala
 500 505 510
 Gly Glu Val Ile Thr Leu Phe Thr Gly Val Leu Phe Phe Phe Thr Asn
 515 520 525
 Ile Lys Asp Leu Phe Met Lys Lys Cys Pro Gly Val Asn Ser Leu Phe
 530 535 540
 Ile Asp Gly Ser Phe Gln Leu Leu Tyr Phe Ile Tyr Ser Val Leu Val
 545 550 555 560
 Ile Val Ser Ala Ala Leu Tyr Leu Ala Gly Ile Glu Ala Tyr Leu Ala
 565 570 575
 Val Met Val Phe Ala Leu Val Leu Gly Trp Met Asn Ala Leu Tyr Phe
 580 585 590 595 600

580

6655.txt
585

590

Thr Arg Gly Leu Lys Leu Thr Gly Thr Tyr Ser Ile Met Ile Gln Lys
595 600 605

Ile Leu Phe Lys Asp Leu Phe Arg Phe Leu Leu Val Tyr Leu Leu Phe
610 615 620

Met Ile Gly Tyr Ala Ser Ala Leu Val Ser Leu Leu Asn Pro Cys Ala
625 630 635 640

Asn Met Lys Val Cys Asn Glu Asp Gln Thr Asn Cys Thr Val Pro Thr
645 650 655

Tyr Pro Ser Cys Arg Asp Ser Glu Thr Phe Ser Thr Phe Leu Leu Asp
660 665 670

Leu Phe Lys Leu Thr Ile Gly Met Gly Asp Leu Glu Met Leu Ser Ser
675 680 685

Thr Lys Tyr Pro Val Val Phe Ile Ile Leu Leu Val Thr Tyr Ile Ile
690 695 700

Leu Thr Phe Val Leu Leu Leu Asn Met Leu Ile Ala Leu Met Gly Glu
705 710 715 720

Thr Val Gly Gln Val Ser Lys Glu Ser Lys His Ile Trp Lys Leu Gln
725 730 735

Trp Ala Thr Thr Ile Leu Asp Ile Glu Arg Ser Phe Pro Val Phe Leu
740 745 750

Arg Lys Ala Phe Arg Ser Gly Glu Met Val Thr Val Gly Lys Ser Ser
755 760 765

Asp Gly Thr Pro Asp Arg Arg Trp Cys Phe Arg Val Asp Glu Val Asn
770 775 780

Trp Ser His Trp Asn Gln Asn Leu Gly Ile Ile Asn Glu Asp Pro Gly
785 790 795 800

Lys Asn Glu Thr Tyr Gln Tyr Tyr Gly Phe Ser His Thr Val Gly Arg
805 810 815

Leu Arg Arg Asp Arg Trp Ser Ser Val Val Pro Arg Val Val Glu Leu
820 825 830

Asn Lys Asn Ser Asn Pro Asp Glu Val Val Val Pro Leu Asp Ser Met
835 840 845

Gly Asn Pro Arg Cys Asp Gly His Gln Gln Gly Tyr Pro Arg Lys Trp
Page 5

850 855 6655.txt 860

Arg Thr Asp Asp Ala Pro Leu
865 870

<210> 3
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> TRPV4 mouse siRNA1

<400> 3
agaagcagca ggucguacau cuugg 25

<210> 4
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> TRPV4 mouse siRNA3

<400> 4
aaacuuggug uucucucggg uguug 25

<210> 5
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> TRPV4 human siRNA1

<400> 5
ggggaagagg cgggcacacu ugagc 25

<210> 6
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> TRPV4 human siRNA3

<400> 6
gcaggucgua caucuuggua acaaa 25