SEQUENCE LISTING

<110> NETRIS PHARMA

<120> Combined treatment with netrin-1 interfering drug and chemotherapeutic drug

<130> BET13L2488

<150> EP 12306100.4
<151> 2012-09-12

<150> US 61/700158
<151> 2012-09-12

<160> 14

<170> PatentIn version 3.5

<210> 1
<211> 446
<212> PRT
<213> Artificial Sequence

<220>
<223> UNC5A-fusion protein UNC5A-TRAP

<400> 1

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Met Asp Phe Gly Leu Arg Leu Ile Phe Leu Val Leu Val Leu Lys Gly
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Val Leu Cys Leu Pro His Phe Leu Val Glu Pro Glu Asp Val Tyr Ile
            20                  25                  30

Val Lys Asn Lys Pro Val Leu Leu Val Cys Lys Ala Val Pro Ala Thr
        35                  40                  45

Gln Ile Phe Phe Lys Cys Asn Gly Glu Trp Val Arg Gln Val Asp His
    50                  55                  60

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

Val Arg Ile Asn Val Ser Arg Gln Gln Val Glu Lys Val Phe Gly Leu
                85                  90                  95

Glu Glu Tyr Trp Cys Gln Cys Val Ala Trp Ser Ser Ser Gly Thr Thr
            100                 105                 110

Lys Ser Gln Lys Ala Tyr Ile Arg Ile Ala Tyr Leu Arg Lys Asn Phe
        115                 120                 125

Glu Gln Glu Pro Leu Ala Lys Glu Val Ser Leu Glu Gln Gly Ile Val
    130                 135                 140
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Leu Pro Cys Arg Pro Pro Glu Gly Ile Pro Pro Ala Glu Val Glu Trp
145                 150                 155                 160

Leu Arg Asn Glu Asp Leu Val Asp Pro Ser Leu Asp Pro Asn Val Tyr
                165                 170                 175

Ile Thr Arg Glu His Ser Leu Val Val Arg Gln Ala Arg Leu Ala Asp
            180                 185                 190

Thr Ala Asn Tyr Thr Cys Val Ala Lys Asn Ile Val Ala Arg Arg Arg
        195                 200                 205

Ser Ala Ser Ala Ala Val Ile Val Tyr Gly Thr Asp Lys Thr His Thr
    210                 215                 220

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

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
                245                 250                 255

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
            260                 265                 270

Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
        275                 280                 285

Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
    290                 295                 300

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
305                 310                 315                 320

Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
                325                 330                 335

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

Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
        355                 360                 365

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
    370                 375                 380

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
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385 390 395 400

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
405 410 415

Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
420 425 430

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
435 440 445

<210> 2
<211> 444
<212> PRT
<213> Artificial Sequence

<220>
<223> UNC5B-fusion protein UNC5B-TRAP

<400> 2

Met Asp Phe Gly Leu Arg Leu Ile Phe Leu Val Leu Val Leu Lys Gly
1 5 10 15

Val Leu Cys Tyr Phe Leu Gln Glu Pro Gln Asp Ala Tyr Ile Val Lys
20 25 30

Asn Lys Pro Val Glu Leu Arg Cys Arg Ala Phe Pro Ala Thr Gln Ile
35 40 45

Tyr Phe Lys Cys Asn Gly Glu Trp Val Ser Gln Asn Asp His Val Thr
50 55 60

Gln Glu Gly Leu Asp Glu Ala Thr Gly Leu Arg Val Arg Glu Val Gln
65 70 75 80

Ile Glu Val Ser Arg Gln Gln Val Glu Glu Leu Phe Gly Leu Glu Asp
85 90 95

Tyr Trp Cys Gln Cys Val Ala Trp Ser Ser Ala Gly Thr Thr Lys Ser
100 105 110

Arg Arg Ala Tyr Val Arg Ile Ala Tyr Leu Arg Lys Asn Phe Asp Gln
115 120 125

Glu Pro Leu Gly Lys Glu Val Pro Leu Asp His Glu Val Leu Leu Gln
130 135 140

Cys Arg Pro Pro Glu Gly Val Pro Val Ala Glu Val Glu Trp Leu Lys
145 150 155 160

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Asn Glu Asp Val Ile Asp Pro Thr Gln Asp Thr Asn Phe Leu Leu Thr
                165                 170                 175

Ile Asp His Asn Leu Ile Ile Arg Gln Ala Arg Leu Ser Asp Thr Ala
            180                 185                 190

Asn Tyr Thr Cys Val Ala Lys Asn Ile Val Ala Lys Arg Arg Ser Thr
        195                 200                 205

Thr Ala Thr Val Ile Val Tyr Gly Thr Asp Lys Thr His Thr Cys Pro
    210                 215                 220

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

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
                245                 250                 255

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
            260                 265                 270

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
        275                 280                 285

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
    290                 295                 300

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
305                 310                 315                 320

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
                325                 330                 335

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

Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
        355                 360                 365

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
    370                 375                 380

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
385                 390                 395                 400

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
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405 410 415

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

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
435 440

<210> 3
<211> 446
<212> PRT
<213> Artificial Sequence

<220>
<223> UNC5C-fusion protein UNC5C-TRAP

<400> 3

Met Asp Phe Gly Leu Arg Leu Ile Phe Leu Val Leu Val Leu Lys Gly
1 5 10 15

Val Leu Cys Leu Pro His Phe Leu Ile Glu Pro Glu Glu Ala Tyr Ile
20 25 30

Val Lys Asn Lys Pro Val Asn Leu Tyr Cys Lys Ala Ser Pro Ala Thr
35 40 45

Gln Ile Tyr Phe Lys Cys Asn Ser Glu Trp Val His Gln Lys Asp His
50 55 60

Ile Val Asp Glu Arg Val Asp Glu Thr Ser Gly Leu Ile Val Arg Glu
65 70 75 80

Val Ser Ile Glu Ile Ser Arg Gln Gln Val Glu Glu Leu Phe Gly Pro
85 90 95

Glu Asp Tyr Trp Cys Gln Cys Val Ala Trp Ser Ser Ala Gly Thr Thr
100 105 110

Lys Ser Arg Lys Ala Tyr Val Arg Ile Ala Tyr Leu Arg Lys Thr Phe
115 120 125

Glu Gln Glu Pro Leu Gly Lys Glu Val Ser Leu Glu Gln Glu Val Leu
130 135 140

Leu Gln Cys Arg Pro Pro Glu Gly Ile Pro Val Ala Glu Val Glu Trp
145 150 155 160

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

```
Ile Thr Ile Asp His Asn Leu Ile Ile Lys Gln Ala Arg Leu Ser Asp
            180                 185                 190

Thr Ala Asn Tyr Thr Cys Val Ala Lys Asn Ile Val Ala Lys Arg Lys
        195                 200                 205

Ser Thr Thr Ala Thr Val Ile Val Tyr Gly Thr Asp Lys Thr His Thr
    210                 215                 220

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

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
                245                 250                 255

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
            260                 265                 270

Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
        275                 280                 285

Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
    290                 295                 300

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
305                 310                 315                 320

Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
                325                 330                 335

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

Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
        355                 360                 365

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
    370                 375                 380

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
385                 390                 395                 400

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
                405                 410                 415

Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
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420 425 430

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
435 440 445

<210> 4
<211> 446
<212> PRT
<213> Artificial Sequence

<220>
<223> UNC5D-fusion protein UNC5D-TRAP

<400> 4

Met Asp Phe Gly Leu Arg Leu Ile Phe Leu Val Leu Val Leu Lys Gly
1 5 10 15

Val Leu Cys Leu Pro His Phe Ile Glu Glu Pro Asp Asp Ala Tyr Ile
20 25 30

Ile Lys Ser Asn Pro Ile Ala Leu Arg Cys Lys Ala Arg Pro Ala Met
35 40 45

Gln Ile Phe Phe Lys Cys Asn Gly Glu Trp Val His Gln Asn Glu His
50 55 60

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

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

Glu Asp Tyr Trp Cys Gln Cys Val Ala Trp Ser His Leu Gly Thr Ser
100 105 110

Lys Ser Arg Lys Ala Ser Val Arg Ile Ala Tyr Leu Arg Lys Asn Phe
115 120 125

Glu Gln Asp Pro Gln Gly Arg Glu Val Pro Ile Glu Gly Met Ile Val
130 135 140

Leu His Cys Arg Pro Pro Glu Gly Val Pro Ala Ala Glu Val Glu Trp
145 150 155 160

Leu Lys Asn Glu Glu Pro Ile Asp Ser Glu Gln Asp Glu Asn Ile Asp
165 170 175

Thr Arg Ala Asp His Asn Leu Ile Ile Arg Gln Ala Arg Leu Ser Asp
180 185 190

```
Ser Gly Asn Tyr Thr Cys Met Ala Ala Asn Ile Val Ala Lys Arg Arg
        195                 200                 205

Ser Leu Ser Ala Thr Val Val Val Tyr Gly Thr Asp Lys Thr His Thr
    210                 215                 220

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

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
                245                 250                 255

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
            260                 265                 270

Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
        275                 280                 285

Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
    290                 295                 300

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
305                 310                 315                 320

Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
                325                 330                 335

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

Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
        355                 360                 365

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
    370                 375                 380

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
385                 390                 395                 400

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
                405                 410                 415

Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
            420                 425                 430

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
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435 440 445

<210> 5
<211> 672
<212> DNA
<213> Artificial Sequence

<220>
<223> UNC5A DNA sequence

<400> 5
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ggcgtgctgt gcctgcccca cttcctggtg gaacccgagg acgtgtacat cgtgaagaac 120

aagcccgtgc tgctggtgtg caaggccgtg cccgccaccc agattttctt caagtgcaac 180

ggcgagtggg tgcgccaggt ggaccacgtg atcgagagaa gcaccgacgg cagcagcggc 240

ctgcccacaa tggaagtgcg gatcaacgtg tcccggcagc aggtggaaaa ggtgttcggc 300

ctggaagagt actggtgcca gtgcgtggcc tggtccagca gcggcaccac caagagccag 360

aaggcctaca tccggatcgc ctacctgcgg aagaacttcg agcaggaacc cctggccaaa 420

gaggtgtccc tggaacaggg catcgtgctg ccctgcagac cccctgaggg cattcccccc 480

gccgaggtgg aatggctgcg gaacgaggac ctggtggacc ccagcctgga ccccaatgtg 540

tacatcaccc gcgagcacag cctggtggtg agacaggccc gcctggccga caccgccaac 600

tacacctgtg tggccaagaa catcgtggcc agacggcgct ctgcctctgc cgccgtgatc 660

gtgtacggta cc 672

<210> 6
<211> 666
<212> DNA
<213> Artificial Sequence

<220>
<223> UNC5B DNA sequence

<400> 6
aagcttgccg ccaccatgga cttcggcctg cggctgatct tcctggtgct ggtgctgaag 60

ggcgtgctgt gctactttct gcaagaaccc caggacgcct acatcgtgaa gaacaagccc 120

gtggaactgc ggtgccgggc cttccctgcc acccaaatct acttcaagtg caacggcgag 180

tgggtgtccc agaacgacca cgtgacccag gaaggcctgg acgaggccac aggcctgaga 240

gtgcgcgagg tgcagatcga ggtgtcccgg cagcaggtgg aagaactgtt cggcctggaa 300

gattactggt gccagtgcgt ggcctggtct agcgccggca ccaccaagag cagacgggcc 360

tacgtgcgga tcgcctacct gcggaagaac ttcgaccagg aacccctggg caaagaggtg 420

cccctggacc acgaggtgct gctgcagtgc agacctcctg agggcgtgcc cgtggccgag 480

gtggaatggc tgaagaacga ggacgtgatc gaccctaccc aggataccaa cttcctgctg 540

accatcgacc acaacctgat catccggcag gcccggctga gcgacaccgc caattacacc 600

tgtgtggcca agaacatcgt ggccaagcgg cggagcacca ccgccaccgt gatcgtgtac 660

ggtacc 666

<210> 7
<211> 672
<212> DNA
<213> Artificial Sequence

<220>
<223> UNC5C DNA sequence

<400> 7
aagcttgccg ccaccatgga cttcggcctg cggctgatct tcctggtgct ggtgctgaag 60

ggcgtgctgt gcctgcccca cttcctgatc gagcccgaag aggcctacat cgtgaagaac 120

aagcccgtga acctgtactg caaggccagc cccgccaccc aaatctactt caagtgcaac 180

agcgagtggg tgcaccagaa agaccacatc gtggacgagc gggtggacga gacaagcggc 240

ctgatcgtgc gcgaggtgtc catcgagatc agccggcagc aggtggaaga actgttcggc 300

cccgaggact actggtgcca gtgcgtggcc tggtctagcg ccggcaccac caagagccgg 360

aaggcctacg tgcggatcgc ctacctgaga aagaccttcg agcaggaacc cctgggcaaa 420

gaggtgtccc tggaacaaga agtgctgctg cagtgcagac cccccgaggg aatccccgtg 480

gccgaggtgg aatggctgaa gaacgaggac atcatcgacc ccgtggaaga tcggaacttc 540

tacatcacca tcgaccacaa cctgatcatc aagcaggccc ggctgagcga caccgccaac 600

tacacctgtg tggccaagaa catcgtggcc aagcggaagt ccaccaccgc caccgtgatc 660

gtgtacggta cc 672

<210> 8
<211> 672
<212> DNA
<213> Artificial Sequence

<220>
<223> UNC5D DNA sequence

<400> 8
aagcttgccg ccaccatgga cttcggcctg cggctgatct tcctggtgct ggtgctgaag 60

ggcgtgctgt gcctgcccca cttcatcgaa gagcccgacg acgcctacat catcaagagc 120

aaccccatcg ccctgcgctg caaggcccgc cccgccatgc agattttctt caagtgcaac 180

ggcgagtggg tgcaccagaa cgagcacgtg agcgaggaga ccctggacga gagcagcggc 240

ctgaaggtgc gggaagtgtt catcaacgtg acacggcagc aggtggaaga cttccacggc 300

cccgaagact actggtgcca gtgcgtggcc tggtcccacc tgggcaccag caagagccgg 360

aaggccagcg tgcggatcgc ctacctgcgg aagaacttcg agcaggaccc ccagggccgg 420

gaggtgccca tcgagggcat gatcgtgctg cactgcagac cccctgaggg cgtgcccgcc 480

gccgaggtgg aatggctgaa gaacgaggag cccattgaca gcgagcagga cgagaatatt 540

gacacccgcg ccgaccacaa tctgattatt agacaggccc gcctgagcga cagcggcaac 600

tacacctgta tggccgccaa catcgtggcc aagcggcgct ctctgtctgc caccgtggtg 660

gtgtacggta cc 672

<210> 9
<211> 699
<212> DNA
<213> Artificial Sequence

<220>
<223> Human IgG1 Fc coding sequence

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agcgtgttcc tgttcccccc aaagcccaag gacaccctga tgatcagccg gacccccgaa 120

gtgacctgcg tggtggtgga cgtgtcccac gaggaccctg aagtgaagtt caattggtac 180

gtggacggcg tggaagtgca caacgccaag accaagccca gagaggaaca gtacaacagc 240

acctaccggg tggtgtccgt gctgaccgtg ctgcaccagg actggctgaa cggcaaagag 300

tacaagtgca aagtctccaa caaggccctg cctgccccca tcgagaaaac catcagcaag 360

gccaagggac agccccgcga gcctcaggtg tacacactgc cccccagccg ggaagagatg 420

accaagaacc aggtgtccct gacctgcctg gtcaagggct tttaccccag cgatatcgcc 480

gtggaatggg agagcaacgg ccagcccgag aacaattaca agaccacccc ccctgtgctg 540

gacagcgacg gctcattctt cctgtacagc aagctgaccg tggacaagag ccggtggcag 600

cagggcaacg tgttcagctg cagcgtgatg cacgaggccc tgcacaacca ctacacccag 660

aagtccctga gcctgagccc cggcaagtaa taatctaga 699

<210> 10
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> siRNA targeting netrin-1

<400> 10
aagcuggacg cagcaugaug c 21

<210> 11
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Forward primer

<400> 11
aaaagtactg caagaaggac tatgc 25

<210> 12
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Reverse primer

<400> 12
ccctgcttat acacggagat g 21

<210> 13
<211> 580
<212> PRT
<213> Homo sapiens

<400> 13

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

Cys Ser Asp Glu Asn Gly His Pro Arg Arg Cys Ile Pro Asp Phe Val
20 25 30

Asn Ala Ala Phe Gly Lys Asp Val Arg Val Ser Ser Thr Cys Gly Arg
35 40 45

Pro Pro Ala Arg Tyr Cys Val Val Ser Glu Arg Gly Glu Glu Arg Leu
50 55 60

Arg Ser Cys His Leu Cys Asn Ala Ser Asp Pro Lys Lys Ala His Pro
65 70 75 80

Pro Ala Phe Leu Thr Asp Leu Asn Asn Pro His Asn Leu Thr Cys Trp
85 90 95

Gln Ser Glu Asn Tyr Leu Gln Phe Pro His Asn Val Thr Leu Thr Leu
100 105 110

Ser Leu Gly Lys Lys Phe Glu Val Thr Tyr Val Ser Leu Gln Phe Cys
115 120 125

Ser Pro Arg Pro Glu Ser Met Ala Ile Tyr Lys Ser Met Asp Tyr Gly
130 135 140

```
Arg Thr Trp Val Pro Phe Gln Phe Tyr Ser Thr Gln Cys Arg Lys Met
145                 150                 155                 160

Tyr Asn Arg Pro His Arg Ala Pro Ile Thr Lys Gln Asn Glu Gln Glu
                165                 170                 175

Ala Val Cys Thr Asp Ser His Thr Asp Met Arg Pro Leu Ser Gly Gly
            180                 185                 190

Leu Ile Ala Phe Ser Thr Leu Asp Gly Arg Pro Ser Ala His Asp Phe
        195                 200                 205

Asp Asn Ser Pro Val Leu Gln Asp Trp Val Thr Ala Thr Asp Ile Arg
    210                 215                 220

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

Ser Glu Leu Ala Arg Asp Ser Tyr Phe Tyr Ala Val Ser Asp Leu Gln
                245                 250                 255

Val Gly Gly Arg Cys Lys Cys Asn Gly His Ala Ala Arg Cys Val Arg
            260                 265                 270

Asp Arg Thr Asp Ser Leu Val Cys Asp Cys Arg His Asn Thr Ala Gly
        275                 280                 285

Pro Glu Cys Asp Arg Cys Lys Pro Phe His Tyr Asp Arg Pro Trp Gln
    290                 295                 300

Arg Ala Thr Ala Arg Glu Ala Asn Glu Cys Val Ala Cys Asn Cys Asn
305                 310                 315                 320

Leu His Ala Arg Arg Cys Arg Phe Asn Met Glu Leu Tyr Lys Leu Ser
                325                 330                 335

Gly Arg Lys Ser Gly Gly Val Cys Leu Asn Cys Arg His Asn Thr Ala
            340                 345                 350

Gly Arg His Cys His Tyr Cys Lys Glu Gly Tyr Tyr Arg Asp Met Gly
        355                 360                 365

Lys Pro Ile Thr His Arg Lys Ala Cys Lys Ala Cys Asp Cys His Pro
    370                 375                 380

Val Gly Ala Ala Gly Lys Thr Cys Asn Gln Thr Thr Gly Gln Cys Pro
385                 390                 395                 400
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Cys Lys Asp Gly Val Thr Gly Ile Thr Cys Asn Arg Cys Ala Lys Gly
                405                 410                 415

Tyr Gln Gln Ser Arg Ser Pro Ile Ala Pro Cys Ile Lys Ile Pro Val
            420                 425                 430

Ala Pro Pro Thr Thr Ala Ala Ser Ser Val Glu Glu Pro Glu Asp Cys
        435                 440                 445

Asp Ser Tyr Cys Lys Ala Ser Lys Gly Lys Leu Lys Ile Asn Met Lys
    450                 455                 460

Lys Tyr Cys Lys Lys Asp Tyr Ala Val Gln Ile His Ile Leu Lys Ala
465                 470                 475                 480

Asp Lys Ala Gly Asp Trp Trp Lys Phe Thr Val Asn Ile Ile Ser Val
                485                 490                 495

Tyr Lys Gln Gly Thr Ser Arg Ile Arg Arg Gly Asp Gln Ser Leu Trp
            500                 505                 510

Ile Arg Ser Arg Asp Ile Ala Cys Lys Cys Pro Lys Ile Lys Pro Leu
        515                 520                 525

Lys Lys Tyr Leu Leu Leu Gly Asn Ala Glu Asp Ser Pro Asp Gln Ser
    530                 535                 540

Gly Ile Val Ala Asp Lys Ser Ser Leu Val Ile Gln Trp Arg Asp Thr
545                 550                 555                 560

Trp Ala Arg Arg Leu Arg Lys Phe Gln Gln Arg Glu Lys Lys Gly Lys
                565                 570                 575

Cys Lys Lys Ala
            580
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<210> 14
<211> 1815
<212> DNA
<213> Artificial Sequence

<220>
<223> human netrin-1 cDNA sequence

<400> 14

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atgatgcgcg cagtgtggga ggcgctggcg gcgctggcgg cggtggcgtg cctggtgggc       60

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tgctcggacg agaacggcca cccgcgccgc tgcatcccgg actttgtcaa tgcggccttc      180
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ggcaaggacg tgcgcgtgtc cagcacctgc ggccggcccc cggcgcgcta ctgcgtggtg 240

agcgagcgcg gcgaggagcg gctgcgctcg tgccacctct gcaacgcgtc cgaccccaag 300

aaggcgcacc cgcccgcctt cctcaccgac ctcaacaacc cgcacaacct gacgtgctgg 360

cagtccgaga actacctgca gttcccgcac aacgtcacgc tcacactgtc cctcggcaag 420

aagttcgaag tgacctacgt gagcctgcag ttctgctcgc cgcggcccga gtccatggcc 480

atctacaagt ccatggacta cgggcgcacg tgggtgccct tccagttcta ctccacgcag 540

tgccgcaaga tgtacaaccg gccgcaccgc gcgcccatca ccaagcagaa cgagcaggag 600

gccgtgtgca ccgactcgca caccgacatg cgcccgctct cgggcggcct catcgccttc 660

agcacgctgg acgggcggcc ctcggcgcac gacttcgaca actcgcccgt gctgcaggac 720

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ggccagtgtc cctgcaagga cggcgtgacg ggtatcacct gcaaccgctg cgccaaaggc 1320

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actgcagcca gcagcgtgga ggagcctgaa gactgcgatt cctactgcaa ggcctccaag 1440

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