SEQUENCE LISTING

<110> RESEARCH INSTITUTE AT NATIONWIDE CHILDREN'S HOSPITAL
RODINO-KLAPAC, et al.

<120> ADENO-ASSOCIATED VIRUS VECTOR DELIVERY OF MICRODYSTROPHIN TO TREAT MUSCULAR DYSTROPHY

<130> 28335/51908

<150> US 62/473,253
<151> 2017-03-17

<150> US 62/232,163
<151> 2016-04-15

<160> 12

<170> PatentIn version 3.5

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Gln Lys Lys Thr Phe Thr Lys Trp Val Asn Ala Gln Phe Ser Lys Phe
20 25 30

ggg aag cag cac atc gag aat ctg ttt tcc gac ctg cag gat ggg aga 144
Gly Lys Gln His Ile Glu Asn Leu Phe Ser Asp Leu Gln Asp Gly Arg
35 40 45

cgg ctg ctg gat ctg ctg gaa gga ctg act ggc cag aag ctg ccc aaa 192
Arg Leu Leu Asp Leu Leu Glu Gly Leu Thr Gly Gln Lys Leu Pro Lys
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gag aag ggg agc act agg gtg cac gcc ctg aac aac gtg aac aaa gct 240

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ctg aga gtg ctg cag aac aac aac gtg gat ctg gtg aat att ggc agt        288
Leu Arg Val Leu Gln Asn Asn Asn Val Asp Leu Val Asn Ile Gly Ser
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act gat atc gtg gac ggg aac cac aaa ctg aca ctg ggc ctg atc tgg        336
Thr Asp Ile Val Asp Gly Asn His Lys Leu Thr Leu Gly Leu Ile Trp
            100                 105                 110

aac att att ctg cac tgg cag gtg aaa aat gtg atg aag aac atc atg        384
Asn Ile Ile Leu His Trp Gln Val Lys Asn Val Met Lys Asn Ile Met
        115                 120                 125

gcc ggg ctg cag cag acc aat tcc gag aag atc ctg ctg tct tgg gtg        432
Ala Gly Leu Gln Gln Thr Asn Ser Glu Lys Ile Leu Leu Ser Trp Val
    130                 135                 140

cgg cag agc acc cgc aac tat ccc cag gtg aac gtg att aac ttc act        480
Arg Gln Ser Thr Arg Asn Tyr Pro Gln Val Asn Val Ile Asn Phe Thr
145                 150                 155                 160

aca tcc tgg agc gac ggg ctg gcc ctg aat gct ctg att cac agc cac        528
Thr Ser Trp Ser Asp Gly Leu Ala Leu Asn Ala Leu Ile His Ser His
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agg cct gat ctg ttc gac tgg aat agc gtg gtg tgc cag cag tct gcc        576
Arg Pro Asp Leu Phe Asp Trp Asn Ser Val Val Cys Gln Gln Ser Ala
            180                 185                 190

aca cag cgc ctg gaa cat gcc ttc aat atc gct cgg tac cag ctg ggg        624
Thr Gln Arg Leu Glu His Ala Phe Asn Ile Ala Arg Tyr Gln Leu Gly
        195                 200                 205

atc gaa aaa ctg ctg gac cca gag gat gtg gac act aca tac cca gat        672
Ile Glu Lys Leu Leu Asp Pro Glu Asp Val Asp Thr Thr Tyr Pro Asp
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aaa aag tct att ctg atg tac att act agc ctg ttc cag gtg ctg cca        720
Lys Lys Ser Ile Leu Met Tyr Ile Thr Ser Leu Phe Gln Val Leu Pro
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Gln Gln Val Ser Ile Glu Ala Ile Gln Glu Val Glu Met Leu Pro Arg
                245                 250                 255

ccc ccc aaa gtg act aaa gag gag cat ttt cag ctg cat cat cag atg        816
Pro Pro Lys Val Thr Lys Glu Glu His Phe Gln Leu His His Gln Met
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cat tac agc cag cag att acc gtg agc ctg gct cag gga tat gag cgc        864
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His Tyr Ser Gln Gln Ile Thr Val Ser Leu Ala Gln Gly Tyr Glu Arg
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acc agt agt cca aaa cca cgg ttc aag tcc tac gct tat acc cag gct        912
Thr Ser Ser Pro Lys Pro Arg Phe Lys Ser Tyr Ala Tyr Thr Gln Ala
    290                 295                 300

gcc tac gtg aca act agc gac cct act aga tcc ccc ttt cca tcc cag        960
Ala Tyr Val Thr Thr Ser Asp Pro Thr Arg Ser Pro Phe Pro Ser Gln
305                 310                 315                 320

cac ctg gag gcc cca gag gac aag agc ttt ggg tcc agc ctg atg gaa       1008
His Leu Glu Ala Pro Glu Asp Lys Ser Phe Gly Ser Ser Leu Met Glu
                325                 330                 335

agc gag gtg aat ctg gat cgg tac cag aca gcc ctg gag gag gtg ctg       1056
Ser Glu Val Asn Leu Asp Arg Tyr Gln Thr Ala Leu Glu Glu Val Leu
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agc tgg ctg ctg agt gct gaa gac aca ctg cag gcc cag ggc gaa att       1104
Ser Trp Leu Leu Ser Ala Glu Asp Thr Leu Gln Ala Gln Gly Glu Ile
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tcc aat gac gtg gaa gtg gtg aag gat cag ttc cac aca cac gag ggc       1152
Ser Asn Asp Val Glu Val Val Lys Asp Gln Phe His Thr His Glu Gly
    370                 375                 380

tat atg atg gac ctg aca gct cac cag ggg cgc gtg ggc aat atc ctg       1200
Tyr Met Met Asp Leu Thr Ala His Gln Gly Arg Val Gly Asn Ile Leu
385                 390                 395                 400

cag ctg ggc tct aaa ctg atc ggc acc ggg aaa ctg agt gag gac gag       1248
Gln Leu Gly Ser Lys Leu Ile Gly Thr Gly Lys Leu Ser Glu Asp Glu
                405                 410                 415

gaa aca gaa gtg cag gag cag atg aac ctg ctg aac agc cgc tgg gag       1296
Glu Thr Glu Val Gln Glu Gln Met Asn Leu Leu Asn Ser Arg Trp Glu
            420                 425                 430

tgt ctg aga gtg gct agt atg gag aag cag tcc aac ctg cac cgg gtg       1344
Cys Leu Arg Val Ala Ser Met Glu Lys Gln Ser Asn Leu His Arg Val
        435                 440                 445

ctg atg gac ctg cag aac cag aaa ctg aaa gag ctg aac gac tgg ctg       1392
Leu Met Asp Leu Gln Asn Gln Lys Leu Lys Glu Leu Asn Asp Trp Leu
    450                 455                 460

aca aag act gag gaa cgc aca agg aag atg gag gag gag cca ctg gga       1440
Thr Lys Thr Glu Glu Arg Thr Arg Lys Met Glu Glu Glu Pro Leu Gly
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ccc gac ctg gag gat ctg aag aga cag gtg cag cag cat aag gtg ctg       1488
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Gln Glu Asp Leu Glu Gln Glu Gln Val Arg Val Asn Ser Leu Thr His
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atg gtg gtg gtg gtg gac gaa tct agt gga gat cac gcc acc gcc gcc       1584
Met Val Val Val Val Asp Glu Ser Ser Gly Asp His Ala Thr Ala Ala
        515                 520                 525

ctg gag gaa cag ctg aag gtg ctg ggg gac cgg tgg gcc aac att tgc       1632
Leu Glu Glu Gln Leu Lys Val Leu Gly Asp Arg Trp Ala Asn Ile Cys
    530                 535                 540

cgg tgg acc gag gac agg tgg gtg ctg ctg cag gac atc ctg ctg aaa       1680
Arg Trp Thr Glu Asp Arg Trp Val Leu Leu Gln Asp Ile Leu Leu Lys
545                 550                 555                 560

tgg cag agg ctg acc gag gag cag tgt ctg ttt agt gct tgg ctg agc       1728
Trp Gln Arg Leu Thr Glu Glu Gln Cys Leu Phe Ser Ala Trp Leu Ser
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gag aaa gag gac gcc gtg aac aag atc cac aca acc ggc ttt aag gat       1776
Glu Lys Glu Asp Ala Val Asn Lys Ile His Thr Thr Gly Phe Lys Asp
            580                 585                 590

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Gln Asn Glu Met Leu Ser Ser Leu Gln Lys Leu Ala Val Leu Lys Ala
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gat ctg gag aaa aag aag cag agc atg ggc aaa ctg tat agc ctg aaa       1872
Asp Leu Glu Lys Lys Lys Gln Ser Met Gly Lys Leu Tyr Ser Leu Lys
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gaa gcc tgg ctg gat aac ttt gcc cgc tgc tgg gac aac ctg gtg cag       1968
Glu Ala Trp Leu Asp Asn Phe Ala Arg Cys Trp Asp Asn Leu Val Gln
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aaa ctg gag aaa agt aca gct cag atc tct cag gct gtg acc aca acc       2016
Lys Leu Glu Lys Ser Thr Ala Gln Ile Ser Gln Ala Val Thr Thr Thr
            660                 665                 670

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Pro Pro Pro Pro Gln Lys Lys Arg Thr Leu Glu Arg Leu Gln Glu Leu
705                 710                 715                 720

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Gln Glu Ala Thr Asp Glu Leu Asp Leu Lys Leu Arg Gln Ala Glu Val
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att aag ggg tct tgg cag cct gtg ggc gat ctg ctg att gat tcc ctg       2256
Ile Lys Gly Ser Trp Gln Pro Val Gly Asp Leu Leu Ile Asp Ser Leu
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cag gac cac ctg gaa aag gtg aag gct ctg aga ggc gaa att gct cca       2304
Gln Asp His Leu Glu Lys Val Lys Ala Leu Arg Gly Glu Ile Ala Pro
        755                 760                 765

ctg aag gag aac gtg agt cat gtg aac gat ctg gct aga cag ctg aca       2352
Leu Lys Glu Asn Val Ser His Val Asn Asp Leu Ala Arg Gln Leu Thr
    770                 775                 780

aca ctg ggc atc cag ctg agc cca tac aat ctg agc aca ctg gag gac       2400
Thr Leu Gly Ile Gln Leu Ser Pro Tyr Asn Leu Ser Thr Leu Glu Asp
785                 790                 795                 800

ctg aat acc agg tgg aag ctg ctg cag gtg gct gtg gaa gac cgg gtg       2448
Leu Asn Thr Arg Trp Lys Leu Leu Gln Val Ala Val Glu Asp Arg Val
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cgg cag ctg cat gag gcc cat cgc gac ttc gga cca gcc agc cag cac       2496
Arg Gln Leu His Glu Ala His Arg Asp Phe Gly Pro Ala Ser Gln His
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ttt ctg agc aca tcc gtg cag ggg ccc tgg gag agg gcc att tct ccc       2544
Phe Leu Ser Thr Ser Val Gln Gly Pro Trp Glu Arg Ala Ile Ser Pro
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aac aag gtg ccc tac tat att aat cac gag acc cag acc act tgt tgg       2592
Asn Lys Val Pro Tyr Tyr Ile Asn His Glu Thr Gln Thr Thr Cys Trp
    850                 855                 860

gac cat ccc aag atg aca gaa ctg tac cag tcc ctg gcc gat ctg aac       2640
Asp His Pro Lys Met Thr Glu Leu Tyr Gln Ser Leu Ala Asp Leu Asn
865                 870                 875                 880

aac gtg agg ttt agc gct tac aga acc gct atg aag ctg aga cgg ctg       2688
Asn Val Arg Phe Ser Ala Tyr Arg Thr Ala Met Lys Leu Arg Arg Leu
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cag aag gcc ctg tgc ctg gat ctg ctg tcc ctg tcc gcc gcc tgc gat       2736
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Gln Lys Ala Leu Cys Leu Asp Leu Leu Ser Leu Ser Ala Ala Cys Asp
            900                 905                 910

gcc ctg gat cag cat aat ctg aag cag aac gat cag cca atg gat atc       2784
Ala Leu Asp Gln His Asn Leu Lys Gln Asn Asp Gln Pro Met Asp Ile
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ctg cag atc atc aac tgc ctg acc act atc tac gac agg ctg gag cag       2832
Leu Gln Ile Ile Asn Cys Leu Thr Thr Ile Tyr Asp Arg Leu Glu Gln
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gag cac aac aac ctg gtg aac gtg cct ctg tgc gtg gat atg tgc ctg       2880
Glu His Asn Asn Leu Val Asn Val Pro Leu Cys Val Asp Met Cys Leu
945                 950                 955                 960

aac tgg ctg ctg aac gtg tat gac act ggg cgc acc ggc cgg atc aga       2928
Asn Trp Leu Leu Asn Val Tyr Asp Thr Gly Arg Thr Gly Arg Ile Arg
                965                 970                 975

gtg ctg agt ttt aaa act ggg att atc tcc ctg tgt aag gcc cac ctg       2976
Val Leu Ser Phe Lys Thr Gly Ile Ile Ser Leu Cys Lys Ala His Leu
            980                 985                 990

gag gac aag tac agg tac ctg ttc  aag cag gtg gct agt  agc act gga     3024
Glu Asp Lys Tyr Arg Tyr Leu Phe  Lys Gln Val Ala Ser  Ser Thr Gly
        995                 1000                1005

ttt tgt  gac cag cgc cgc ctg  gga ctg ctg ctg cat  gat agt atc        3069
Phe Cys  Asp Gln Arg Arg Leu  Gly Leu Leu Leu His  Asp Ser Ile
    1010                1015                1020

cag att  cct aga cag ctg gga  gag gtg gct agt ttc  gga gga tct        3114
Gln Ile  Pro Arg Gln Leu Gly  Glu Val Ala Ser Phe  Gly Gly Ser
    1025                1030                1035

aac atc  gaa ccc agc gtg cgc  agc tgt ttc cag ttt  gcc aat aac        3159
Asn Ile  Glu Pro Ser Val Arg  Ser Cys Phe Gln Phe  Ala Asn Asn
    1040                1045                1050

aaa cct  gaa atc gag gct gct  ctg ttc ctg gat tgg  atg cgc ctg        3204
Lys Pro  Glu Ile Glu Ala Ala  Leu Phe Leu Asp Trp  Met Arg Leu
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gaa cca  cag agc atg gtg tgg  ctg cct gtg ctg cac  aga gtg gct        3249
Glu Pro  Gln Ser Met Val Trp  Leu Pro Val Leu His  Arg Val Ala
    1070                1075                1080

gcc gcc  gaa act gcc aag cac  cag gct aaa tgc aac  atc tgc aag        3294
Ala Ala  Glu Thr Ala Lys His  Gln Ala Lys Cys Asn  Ile Cys Lys
    1085                1090                1095

gaa tgt  ccc att atc ggc ttt  cgc tac agg agt ctg  aaa cat ttt        3339
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Glu Cys  Pro Ile Ile Gly Phe  Arg Tyr Arg Ser Leu  Lys His Phe
    1100                1105                1110

aac tac  gat att tgc cag agc  tgc ttc ttt tcc gga  aga gtg gcc        3384
Asn Tyr  Asp Ile Cys Gln Ser  Cys Phe Phe Ser Gly  Arg Val Ala
    1115                1120                1125

aaa gga  cac aag atg cac tac  cct atg gtg gaa tat  tgc acc cca        3429
Lys Gly  His Lys Met His Tyr  Pro Met Val Glu Tyr  Cys Thr Pro
    1130                1135                1140

act aca  tct ggc gaa gat gtg  cgc gat ttt gcc aag  gtg ctg aag        3474
Thr Thr  Ser Gly Glu Asp Val  Arg Asp Phe Ala Lys  Val Leu Lys
    1145                1150                1155

aat aag  ttt cgg act aag agg  tac ttc gcc aag cac  ccc cgc atg        3519
Asn Lys  Phe Arg Thr Lys Arg  Tyr Phe Ala Lys His  Pro Arg Met
    1160                1165                1170

ggg tat  ctg cca gtg cag aca  gtg ctg gaa gga gac  aat atg gag        3564
Gly Tyr  Leu Pro Val Gln Thr  Val Leu Glu Gly Asp  Asn Met Glu
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acc gat  aca atg tga gc                                           3581
Thr Asp  Thr Met
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Gly Lys Gln His Ile Glu Asn Leu Phe Ser Asp Leu Gln Asp Gly Arg
        35                  40                  45

Arg Leu Leu Asp Leu Leu Glu Gly Leu Thr Gly Gln Lys Leu Pro Lys
    50                  55                  60

Glu Lys Gly Ser Thr Arg Val His Ala Leu Asn Asn Val Asn Lys Ala
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Leu Arg Val Leu Gln Asn Asn Asn Val Asp Leu Val Asn Ile Gly Ser
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Thr Asp Ile Val Asp Gly Asn His Lys Leu Thr Leu Gly Leu Ile Trp
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Asn Ile Ile Leu His Trp Gln Val Lys Asn Val Met Lys Asn Ile Met
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Ala Gly Leu Gln Gln Thr Asn Ser Glu Lys Ile Leu Leu Ser Trp Val
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Arg Gln Ser Thr Arg Asn Tyr Pro Gln Val Asn Val Ile Asn Phe Thr
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Thr Ser Trp Ser Asp Gly Leu Ala Leu Asn Ala Leu Ile His Ser His
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Arg Pro Asp Leu Phe Asp Trp Asn Ser Val Val Cys Gln Gln Ser Ala
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Ile Glu Lys Leu Leu Asp Pro Glu Asp Val Asp Thr Thr Tyr Pro Asp
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Lys Lys Ser Ile Leu Met Tyr Ile Thr Ser Leu Phe Gln Val Leu Pro
225 230 235 240

Gln Gln Val Ser Ile Glu Ala Ile Gln Glu Val Glu Met Leu Pro Arg
245 250 255

Pro Pro Lys Val Thr Lys Glu Glu His Phe Gln Leu His His Gln Met
260 265 270

His Tyr Ser Gln Gln Ile Thr Val Ser Leu Ala Gln Gly Tyr Glu Arg

275 280 285

Thr Ser Ser Pro Lys Pro Arg Phe Lys Ser Tyr Ala Tyr Thr Gln Ala
290 295 300

Ala Tyr Val Thr Thr Ser Asp Pro Thr Arg Ser Pro Phe Pro Ser Gln
305 310 315 320

His Leu Glu Ala Pro Glu Asp Lys Ser Phe Gly Ser Ser Leu Met Glu
325 330 335

Ser Glu Val Asn Leu Asp Arg Tyr Gln Thr Ala Leu Glu Glu Val Leu
340 345 350

Ser Trp Leu Leu Ser Ala Glu Asp Thr Leu Gln Ala Gln Gly Glu Ile
355 360 365

Ser Asn Asp Val Glu Val Val Lys Asp Gln Phe His Thr His Glu Gly
370 375 380

Tyr Met Met Asp Leu Thr Ala His Gln Gly Arg Val Gly Asn Ile Leu
385 390 395 400

Gln Leu Gly Ser Lys Leu Ile Gly Thr Gly Lys Leu Ser Glu Asp Glu
405 410 415

Glu Thr Glu Val Gln Glu Gln Met Asn Leu Leu Asn Ser Arg Trp Glu
420 425 430

Cys Leu Arg Val Ala Ser Met Glu Lys Gln Ser Asn Leu His Arg Val
435 440 445

Leu Met Asp Leu Gln Asn Gln Lys Leu Lys Glu Leu Asn Asp Trp Leu
450 455 460

Thr Lys Thr Glu Glu Arg Thr Arg Lys Met Glu Glu Glu Pro Leu Gly
465 470 475 480

Pro Asp Leu Glu Asp Leu Lys Arg Gln Val Gln Gln His Lys Val Leu

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                485                 490                 495

Gln Glu Asp Leu Glu Gln Glu Gln Val Arg Val Asn Ser Leu Thr His
            500                 505                 510

Met Val Val Val Val Asp Glu Ser Ser Gly Asp His Ala Thr Ala Ala
        515                 520                 525

Leu Glu Glu Gln Leu Lys Val Leu Gly Asp Arg Trp Ala Asn Ile Cys
    530                 535                 540

Arg Trp Thr Glu Asp Arg Trp Val Leu Leu Gln Asp Ile Leu Leu Lys
545                 550                 555                 560

Trp Gln Arg Leu Thr Glu Glu Gln Cys Leu Phe Ser Ala Trp Leu Ser
                565                 570                 575

Glu Lys Glu Asp Ala Val Asn Lys Ile His Thr Thr Gly Phe Lys Asp
            580                 585                 590

Gln Asn Glu Met Leu Ser Ser Leu Gln Lys Leu Ala Val Leu Lys Ala
        595                 600                 605

Asp Leu Glu Lys Lys Lys Gln Ser Met Gly Lys Leu Tyr Ser Leu Lys
    610                 615                 620

Gln Asp Leu Leu Ser Thr Leu Lys Asn Lys Ser Val Thr Gln Lys Thr
625                 630                 635                 640

Glu Ala Trp Leu Asp Asn Phe Ala Arg Cys Trp Asp Asn Leu Val Gln
                645                 650                 655

Lys Leu Glu Lys Ser Thr Ala Gln Ile Ser Gln Ala Val Thr Thr Thr
            660                 665                 670

Gln Pro Ser Leu Thr Gln Thr Thr Val Met Glu Thr Val Thr Thr Val
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Thr Thr Arg Glu Gln Ile Leu Val Lys His Ala Gln Glu Glu Leu Pro
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690 695 700

Pro Pro Pro Pro Gln Lys Lys Arg Thr Leu Glu Arg Leu Gln Glu Leu
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Gln Glu Ala Thr Asp Glu Leu Asp Leu Lys Leu Arg Gln Ala Glu Val
725 730 735

Ile Lys Gly Ser Trp Gln Pro Val Gly Asp Leu Leu Ile Asp Ser Leu
740 745 750

Gln Asp His Leu Glu Lys Val Lys Ala Leu Arg Gly Glu Ile Ala Pro
755 760 765

Leu Lys Glu Asn Val Ser His Val Asn Asp Leu Ala Arg Gln Leu Thr
770 775 780

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

Leu Asn Thr Arg Trp Lys Leu Leu Gln Val Ala Val Glu Asp Arg Val
805 810 815

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

Phe Leu Ser Thr Ser Val Gln Gly Pro Trp Glu Arg Ala Ile Ser Pro
835 840 845

Asn Lys Val Pro Tyr Tyr Ile Asn His Glu Thr Gln Thr Thr Cys Trp
850 855 860

Asp His Pro Lys Met Thr Glu Leu Tyr Gln Ser Leu Ala Asp Leu Asn
865 870 875 880

Asn Val Arg Phe Ser Ala Tyr Arg Thr Ala Met Lys Leu Arg Arg Leu
885 890 895

Gln Lys Ala Leu Cys Leu Asp Leu Leu Ser Leu Ser Ala Ala Cys Asp

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Ala Leu Asp Gln His Asn Leu Lys Gln Asn Asp Gln Pro Met Asp Ile
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Leu Gln Ile Ile Asn Cys Leu Thr Thr Ile Tyr Asp Arg Leu Glu Gln
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Glu His Asn Asn Leu Val Asn Val Pro Leu Cys Val Asp Met Cys Leu
945                 950                 955                 960

Asn Trp Leu Leu Asn Val Tyr Asp Thr Gly Arg Thr Gly Arg Ile Arg
                965                 970                 975

Val Leu Ser Phe Lys Thr Gly Ile Ile Ser Leu Cys Lys Ala His Leu
            980                 985                 990

Glu Asp Lys Tyr Arg Tyr Leu Phe  Lys Gln Val Ala Ser  Ser Thr Gly
        995                 1000                1005

Phe Cys  Asp Gln Arg Arg Leu  Gly Leu Leu Leu His  Asp Ser Ile
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Gln Ile  Pro Arg Gln Leu Gly  Glu Val Ala Ser Phe  Gly Gly Ser
    1025                1030                1035

Asn Ile  Glu Pro Ser Val Arg  Ser Cys Phe Gln Phe  Ala Asn Asn
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Lys Pro  Glu Ile Glu Ala Ala  Leu Phe Leu Asp Trp  Met Arg Leu
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Glu Pro  Gln Ser Met Val Trp  Leu Pro Val Leu His  Arg Val Ala
    1070                1075                1080

Ala Ala  Glu Thr Ala Lys His  Gln Ala Lys Cys Asn  Ile Cys Lys
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Glu Cys  Pro Ile Ile Gly Phe  Arg Tyr Arg Ser Leu  Lys His Phe
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Asn Tyr Asp Ile Cys Gln Ser Cys Phe Phe Ser Gly Arg Val Ala
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Lys Gly His Lys Met His Tyr Pro Met Val Glu Tyr Cys Thr Pro
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Thr Thr Ser Gly Glu Asp Val Arg Asp Phe Ala Lys Val Leu Lys
1145 1150 1155

Asn Lys Phe Arg Thr Lys Arg Tyr Phe Ala Lys His Pro Arg Met
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Gly Tyr Leu Pro Val Gln Thr Val Leu Glu Gly Asp Asn Met Glu
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