

Sequence Listing

<110> Nanjing GenScript Biotech Co., Ltd.

<120> METHOD FOR CONSTRUCTING GENE MUTATION LIBRARY

<130> 25

<160> 25

<170> PatentIn version 3.5

<210> 1

<211> 407

<212> PRT

<213> Artificial sequence

<220>

<223> Amino acid sequence of the protein encoded by the original gene for which the gene mutation library needs to be constructed

<400> 1

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

Thr Glu Asp Ala Glu Arg Phe Gly Asp Val Gly Ala Asp Thr Leu Gly
 20 25 30

His Ile Ala Glu Ala Cys Ala Lys Gly Glu Ala Asp Asn Gly Arg Lys
 35 40 45

Gly Pro Leu Asn Leu Pro Asn Leu Thr Arg Leu Gly Leu Ala Lys Ala
 50 55 60

His Glu Gly Ser Thr Gly Phe Ile Pro Ala Gly Met Asp Gly Asn Ala
65 70 75 80

Glu Val Ile Gly Ala Tyr Ala Trp Ala His Glu Met Ser Ser Gly Lys
85 90 95

Asp Ser Val Ser Gly His Trp Glu Ile Ala Gly Val Pro Val Leu Phe
100 105 110

Glu Trp Gly Tyr Phe Ser Asp His Glu Asn Ser Phe Pro Gln Glu Leu
115 120 125

Leu Asp Lys Leu Val Glu Arg Ala Asn Leu Pro Gly Tyr Leu Gly Asn
130 135 140

Cys Arg Ser Ser Gly Thr Val Ile Leu Asp Gln Leu Gly Glu Glu His
145 150 155 160

Met Lys Thr Gly Lys Trp Ile Phe Tyr Thr Ser Ala Ala Ser Val Phe
165 170 175

Gln Ile Ala Cys His Glu Glu Thr Phe Gly Leu Asp Lys Leu Tyr Glu
180 185 190

Leu Cys Glu Ile Ala Arg Glu Glu Leu Thr Asn Gly Gly Tyr Asn Ile
195 200 205

Gly Arg Val Ile Ala Arg Pro Phe Ile Gly Asp Lys Ala Gly Asn Phe
210 215 220

Gln Arg Thr Gly Asn Arg Arg Asp Leu Ala Val Glu Pro Pro Ala Pro
225 230 235 240

Thr Val Leu Gln Lys Leu Val Asp Glu Lys His Gly Gln Val Val Ser
245 250 255

Val Gly Lys Ile Ala Asp Ile Tyr Ala Asn Cys Gly Ile Thr Lys Lys
260 265 270

Val Lys Ala Thr Gly Leu Asp Ala Leu Phe Asp Ala Thr Ile Lys Glu
275 280 285

Met Lys Glu Ala Gly Asp Asn Thr Ile Val Phe Thr Asn Phe Val Asp
290 295 300

Phe Asp Ser Ser Trp Gly His Arg Arg Asp Val Ala Gly Tyr Ala Ala
305 310 315 320

Gly Leu Glu Leu Phe Asp Arg Arg Leu Pro Glu Leu Met Ser Leu Leu
325 330 335

Arg Asp Asp Asp Ile Leu Ile Leu Thr Ala Asp His Gly Cys Asp Pro
340 345 350

Thr Trp Thr Gly Thr Asp His Thr Arg Glu His Ile Pro Val Leu Val
355 360 365

Tyr Gly Pro Lys Val Lys Pro Gly Ser Leu Gly His Arg Glu Thr Phe
370 375 380

Ala Asp Ile Gly Gln Thr Leu Ala Lys Tyr Phe Gly Thr Ser Asp Met
385 390 395 400

Glu Tyr Gly Lys Ala Met Phe
405

<210> 2
<211> 1224

<212> DNA

<213> Artificial sequence

<220>

<223> Nucleotide sequence of the original gene for which the gene mutation library needs to be constructed

<400> 2

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ggcgaagctg ataacggctg taaaggcccc ctcaatctgc caaatctgac ccgtctgggg    180
ctggcgaaag ctacgaagg ttctaccggt ttattccgg cggaatgga cggcaacgct    240
gaagttatcg gcgcgtacgc atgggcgcac gaaatgtcat ccggtaaaga tagcgtgtct    300
ggtcactggg aaattgccgg tgtcccgggt ctgtttgagt ggggatattt ctccgatcac    360
gaaaacagct tccgcaaga gctgctggat aaactggctg aacgcgctaa tctgccgggt    420
tacctcggtg actgccgttc ttccggtacg gtcattctgg atcaactggg cgaagagcac    480
atgaaaaccg gcaagtggat ttctatacc tccgctgcat ccgtgttcca gattgcctgc    540
catgaagaaa ctttcggtct ggataaactc tacgaactgt gcgaaatcgc ccgtgaagag    600
ctgaccaacg gcggctacaa tatcggtcgt gttatcgctc gtccgtttat cggcgacaaa    660
gccggtact tccagcgtac cggtaacctg cgtgacctgg ctgttgagcc gccagcaccg    720
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gcggacatct acgccaactg cggtatcacc aaaaaagtga aagcgactgg cctggacgcg    840
ctgtttgacg ccaccatcaa agagatgaaa gaagcgggtg ataacaccat cgtcttcacc    900
aattcgttg acttcgactc ttctggggc caccgtcgcg acgtcgccgg ttatgccgcg    960
ggtctggaac tgttcgaccg ccgtctgccg gagctgatgt ctctgctgcg cgatgacgac   1020
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cgatgaacaca ttccgggtact ggtatatggc ccgaaagtaa aaccgggctc actgggtcat 1140

cgatgaacac tgcgggatat cggccagact ctggcaaaat atttgggtac ttctgatatg 1200

gaatatggca aagccatgtt ctaa 1224

<210> 3

<211> 80

<212> DNA

<213> Artificial sequence

<220>

<223> Oligonucleotide comprising mutations synthesized by chip

<400> 3

agaagatgca gaacgctttg gtagcgtcgg ggctgacacc ctgggtcata tcggcgaagc 60

ttgtgcaaaa ggcgaagctg 80

<210> 4

<211> 80

<212> DNA

<213> Artificial sequence

<220>

<223> Oligonucleotide comprising mutations synthesized by chip

<400> 4

agaagatgca gaacgctttg gtagcgtcgg ggctgacacc ctgggtcata tcgttgaagc 60

ttgtgcaaaa ggcgaagctg 80

<210> 5

<211> 80

<212> DNA

<213> Artificial sequence

<220>

<223> Oligonucleotide comprising mutations synthesized by chip

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ttgtgcaaaa ggcgaagctg 80

<210> 6
<211> 80
<212> DNA
<213> Artificial sequence

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<223> Oligonucleotide comprising mutations synthesized by chip

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ttgtgcaaaa ggcgaagctg 80

<210> 7
<211> 80
<212> DNA
<213> Artificial sequence

<220>
<223> Oligonucleotide comprising mutations synthesized by chip

<400> 7
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ttgtgcaaaa ggcgaagctg 80

<210> 8
<211> 80
<212> DNA
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<223> Oligonucleotide comprising mutations synthesized by chip

<400> 8
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ttgtgcaaaa ggcgaagctg 80

<210> 9
<211> 80
<212> DNA
<213> Artificial sequence

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<223> Oligonucleotide comprising mutations synthesized by chip

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ttgtgcaaaa ggcgaagctg 80

<210> 10
<211> 80
<212> DNA
<213> Artificial sequence

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<223> Oligonucleotide comprising mutations synthesized by chip

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ttgtgcaaaa ggcgaagctg 80

<210> 11
<211> 80
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<400> 11

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ttgtgcaaaa ggcgaagctg 80

<210> 12

<211> 80

<212> DNA

<213> Artificial sequence

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<223> Oligonucleotide comprising mutations synthesized by chip

<400> 12

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ttgtgcaaaa ggcgaagctg 80

<210> 13

<211> 80

<212> DNA

<213> Artificial sequence

<220>

<223> Oligonucleotide comprising mutations synthesized by chip

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ttgtgcaaaa ggcgaagctg 80

<210> 14

<211> 80

<212> DNA

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<223> Oligonucleotide comprising mutations synthesized by chip

<400> 14

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ttgtgcaaaa ggcgaagctg

80

<210> 15
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<223> Oligonucleotide comprising mutations synthesized by chip

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<210> 16
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<223> Oligonucleotide comprising mutations synthesized by chip

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ttgtgcaaaa ggcgaagctg

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<210> 17
<211> 80
<212> DNA
<213> Artificial sequence

<220>

<223> Oligonucleotide comprising mutations synthesized by chip

<400> 17
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ttgtgcaaaa ggcgaagctg

80

<210> 18
<211> 80
<212> DNA
<213> Artificial sequence

<220>
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<400> 18
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ttgtgcaaaa ggcgaagctg

80

<210> 19
<211> 80
<212> DNA
<213> Artificial sequence

<220>
<223> Oligonucleotide comprising mutations synthesized by chip

<400> 19
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ttgtgcaaaa ggcgaagctg

80

<210> 20
<211> 80
<212> DNA
<213> Artificial sequence

<220>
<223> Oligonucleotide comprising mutations synthesized by chip

<400> 20
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ttgtgcaaaa ggcgaagctg

80

<210> 21
<211> 80
<212> DNA
<213> Artificial sequence

<220>
<223> Oligonucleotide comprising mutations synthesized by chip

<400> 21
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ttgtgcaaaa ggcgaagctg 80

<210> 22
<211> 25
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer for PCR amplification of the synthesized oligonucleotide comprising mutations

<400> 22
agaagatgca gaacgctttg gtgac 25

<210> 23
<211> 25
<212> DNA
<213> Artificial sequence

<220>
<223> Reverse primer for PCR amplification of the synthesized oligonucleotide comprising mutations

<400> 23
cagcttcgcc tttggcaciaa gcttc 25

<210> 24

<211> 22
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer for PCR amplification of the full-length gene comprising mutations

<400> 24
atgaaacgtg catttattat gg 22

<210> 25
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<223> Reverse primer for PCR amplification of the full-length gene comprising mutations

<400> 25
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