

LISTADO DE SECUENCIAS

<110> Astellas Pharma Inc.

<120> NUEVO FRAGMENTO FAB DEL ANTICUERPO ANTI-NGF HUMANO

<130> FA1535-16021

<150> JP2015-104806

<151> 22/05/2015

<160> 12

<170> PatentIn versión 3.5

<210> 1

<211> 675

<212> ADN

<213> Secuencia artificial

<220>

<223> ADN que codifica el fragmento de cadena pesada h1f.6

<400> 1

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acctgcgctg tctatggtgg gtccttcagt ggttactact ggagctgggt ccgccagccc

120

ccaggggaagg ggctggagtg gattggggaa atcgaccata gtggaagcac caacaacaac

180

ccgtccctca agatcgagt caccatatca gtaggcacgt ccaagaacca gttctccctg

240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgttcgag agatgggggc

300

cccgaatcgg ggatgggggc ttttgatatc tggggccaag ggacaatggt caccgtctcc

360

tcagcctcca ccaagggccc atcgggtcttc cccctggcac cctcctccaa gagcacctct

420

gggggcacag cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacggtg

480

tcgtggaact caggcgcctt gaccagcggc gtgcacacct tcccggctgt cctacagtcc

540

tcaggactct actcccttag tagcgtggtg accgtgccct ccagcagctt gggcaccag

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660

cccaaattctt gtgac

675

<210> 2

<211> 672

<212> ADN
<213> Secuencia artificial

<220>
<223> ADN que codifica el fragmento de cadena pesada h1f.7

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acctgcgctg tctatggtgg gtccttcagt ggttactact ggagctgggt ccgccagccc
120

ccaggggaagg ggctggagtg gattggggaa atcgaccata gtggaagcac caacaacaac
180

ccgtccctca agagtcgagt caccatatca gtaggcacgt ccaagaacca gttctccctg
240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgttcgag agatgggggc
300

cccgaatcgg ggatgggggc ttttgatatc tggggccaag ggacaatggt caccgtctcc
360

tcagcctcca ccaagggccc atcgggtcttc cccctggcac cctcctccaa gagcacctct
420

gggggcacag cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacggtg
480

tcgtggaact caggcgcctt gaccagcggc gtgcacacct tcccggctgt cctacagtcc
540

tcaggactct actcccttag tagcgtggtg accgtgccct ccagcagctt gggcacccag
600

acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gaaagttgag
660

cccaaattctt gt
672

<210> 3
<211> 678
<212> ADN
<213> Secuencia artificial

<220>
<223> ADN que codifica el fragmento de cadena pesada h1f.8

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120

ccaggggaagg ggctggagtg gattggggaa atcgaccata gtggaagcac caacaacaac
180

ccgtccctca agatcgagt caccatatca gtaggcacgt ccaagaacca gttctccctg
240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgttcgag agatgggggc
300

cccgaatcgg ggatgggggc ttttgatatc tggggccaag ggacaatggt caccgtctcc
360

tcagcctcca ccaagggccc atcgggtcttc cccctggcac cctcctccaa gagcacctct
420

gggggcacag cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacggtg
480

tcgtggaact caggcgcctt gaccagcggc gtgcacacct tcccggctgt cctacagtcc
540

tcaggactct actcccttag tagcgtggcg accgtgccct ccagcagctt gggcacccag
600

acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gaaagttgag
660

cccaaattct gtgcagcc
678

<210> 4
<211> 657
<212> ADN
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<220>
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<400> 4
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120

tacctgcaga agccagggca gtctccacag ctctgatct atttgggttc taatcggggc
180

tccgggggtcc ctgacagggt cagtggcagt ggatcaggca cagattttac tctgaaaatc
240

agcagagtgg aggctgagga tgttgggggt tattactgca tgcaagctct acaaactccg
300

tacacttttg gccaggggac caagctggag atcaaacgga ctgtggctgc accatctgtc
360

ttcatcttcc cgccatctga tgagcagttg aaatctggaa ctgcctctgt tgtgtgcctg
420

ctgaataact tctatcccag agaggccaaa gtacagtgga aggtggataa cgccctccaa
480

tcgggtaact cccaggagag tgtcacagag caggacagca aggacagcac ctacagcctc
540

agcagcacc tgacgctgag caaagcagac tacgagaaac acaaagtcta cgctgcgaa
600

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657

<210> 5
<211> 225
<212> PRT
<213> Secuencia artificial

<220>
<223> fragmento de cadena pesada hlf.6

<400> 5

Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr
20 25 30

Tyr Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asp His Ser Gly Ser Thr Asn Asn Asn Pro Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Val Gly Thr Ser Lys Asn Gln Phe Ser Leu
65 70 75 80

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ser
85 90 95

Arg Asp Gly Gly Pro Glu Ser Gly Met Gly Ala Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val

180185190

Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
195200205

Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
210215220

Asp
225

<210> 6
<211> 224
<212> PRT
<213> Secuencia artificial

<220>
<223> fragmento de cadena pesada hlf.7

<400> 6

Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
151015

Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr
202530

Tyr Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
354045

Gly Glu Ile Asp His Ser Gly Ser Thr Asn Asn Asn Pro Ser Leu Lys
505560

Ser Arg Val Thr Ile Ser Val Gly Thr Ser Lys Asn Gln Phe Ser Leu
65707580

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ser
859095

Arg Asp Gly Gly Pro Glu Ser Gly Met Gly Ala Phe Asp Ile Trp Gly
100105110

Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115120125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130135140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145150155160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
195 200 205

Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
210 215 220

<210> 7
<211> 226
<212> PRT
<213> Secuencia artificial

<220>
<223> fragmento de cadena pesada hlf.8

<400> 7

Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr
20 25 30

Tyr Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asp His Ser Gly Ser Thr Asn Asn Asn Pro Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Val Gly Thr Ser Lys Asn Gln Phe Ser Leu
65 70 75 80

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ser
85 90 95

Arg Asp Gly Gly Pro Glu Ser Gly Met Gly Ala Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
195 200 205

Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
210 215 220

Ala Ala
225

<210> 8
<211> 219
<212> PRT
<213> Secuencia artificial

<220>
<223> cadena ligera de fragmento Fab' 1-15 (N52D-A)

<400> 8

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Asn Gly Phe Asn Tyr Leu Gly Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165 170 175

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
180 185 190

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 9
<211> 363
<212> ADN
<213> Secuencia artificial

<220>
<223> Gen VH del anticuerpo anti-NGF humano

<220>
<221> CDS
<222> (1)..(363)

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48
Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
1 5 10 15
acc ctg tcc ctc acc tgc gct gtc tat ggt ggg tcc ttc agt ggt tac
96
Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr
20 25 30
tac tgg agc tgg gtc cgc cag ccc cca ggg aag ggg ctg gag tgg att
144
Tyr Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45
ggg gaa atc gac cat agt gga agc acc aac aac aac ccg tcc ctc aag
192
Gly Glu Ile Asp His Ser Gly Ser Thr Asn Asn Asn Pro Ser Leu Lys
50 55 60

agt cga gtc acc ata tca gta ggc acg tcc aag aac cag ttc tcc ctg
240
Ser Arg Val Thr Ile Ser Val Gly Thr Ser Lys Asn Gln Phe Ser Leu
65 70 75 80

aag ctg agc tct gtg acc gcc gcg gac acg gct gtg tat tac tgt tcg
288
Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ser
85 90 95

aga gat ggg ggc ccc gaa tcg ggg atg ggg gct ttt gat atc tgg ggc
336
Arg Asp Gly Gly Pro Glu Ser Gly Met Gly Ala Phe Asp Ile Trp Gly
100 105 110

caa ggg aca atg gtc acc gtc tcc tca
363
Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 10
<211> 121
<212> PRT
<213> Secuencia artificial

<220>
<223> Construcción sintética

<400> 10

Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr
20 25 30

Tyr Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asp His Ser Gly Ser Thr Asn Asn Asn Pro Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Val Gly Thr Ser Lys Asn Gln Phe Ser Leu
65 70 75 80

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ser
85 90 95

Arg Asp Gly Gly Pro Glu Ser Gly Met Gly Ala Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 11
<211> 339
<212> ADN
<213> Secuencia artificial

<220>
<223> Gen VL del anticuerpo anti-NGF humano

<220>
<221> CDS
<222> (1)..(339)

<400> 11
gat att gtg atg act cag tct cca ctc tcc ctg ccc gtc acc cct gga
48
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

gag ccg gcc tcc atc tcc tgc agg tct agt cag agc ctc ctg cat agt
96
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

aat gga ttc aac tat ttg ggt tgg tac ctg cag aag cca ggg cag tct
144
Asn Gly Phe Asn Tyr Leu Gly Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

cca cag ctc ctg atc tat ttg ggt tct aat cgg gcc tcc ggg gtc cct
192
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

gac agg ttc agt ggc agt gga tca ggc aca gat ttt act ctg aaa atc
240
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

agc aga gtg gag gct gag gat gtt ggg gtt tat tac tgc atg caa gct
288
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

cta caa act ccg tac act ttt ggc cag ggg acc aag ctg gag atc aaa
336
Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

cgg
339
Arg

<210> 12
<211> 113
<212> PRT
<213> Secuencia artificial

<220>
<223> Construcción sintética

<400> 12

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Asn Gly Phe Asn Tyr Leu Gly Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg