

1 Información sobre la lista de secuencias

1-1 Nombre del fichero **FA1535-23031 SEQ Listing.xml**

1- Versión de la DTD
2 **V1_3**

1- Nombre del software
3 **WIPO Sequence**

1- Versión del software
4 **2.2.0**

1- Fecha de producción
5 **2023-04-14**

2 Información general

2- Solicitud actual:

4 Referencia al expediente del
solicitante **FA1535-23031**

2- Solicitud de prioridad

5 más antigua: Oficina **JP**
de PI

2- Solicitud de prioridad
6 más antigua: Número **2022-078632**
de solicitud

2-7 Solicitud de prioridad
más antigua: Fecha **2022-05-12**
de presentación

2- Nombre del
8e solicitante **Astellas Pharma Inc.**
n

2- Título de la invención
10 **anti-TAA-anti-CD3 multispecific antibody**
en

2- Título de la invención
10j **抗 TAA-抗 CD3 多重特異性抗体**
a

2- Número total de
11 secuencias **67**

3-1 Secuencias

3- Identificador de la
1-1 secuencia **1**

3- Tipo de molécula
1- **DNA**
2

3- Extensión

1- **1353**
3

3- Características **source 1..1353**

1- Localización/Califica **mol_type = other DNA**

4-1 does **organism = synthetic construct**

3- Características **CDS 1..1353**

1- Localización/Califica **protein_id = 2**

4- does

2 **translation =**

**QVQLVESGGGVVQPGGSLRLSCAASGFTFSSYGMHWVRQAPGKGLEWVAVIWYDGRNKYYADSVKGRFTISRDN SKN
TLYLQMNSLRAEDTAVYYCTRDHSGSGSYIDYWQGGLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPV
TVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPEA
AGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQDW
LNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLSCAVKGFPYPSDIAVEWESNGQPENNYKT
PPVLDSDGSFFLVSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK**

3- Residuos

1- **caggttcagc tggttgaatc tggcggcgga gttgttcagc ctggcggatc tctgagactg60**
5

tcttggtccg cctccggctt caccttctcc tcttacggaa tgcactgggt ccgacaggcc120

cctggcaaag gattggaatg ggtcgccgtg atttggtacg acggccggaa caagtactac180

gccgactccg tgaagggcag attcaccatc tctcgggaca actccaagaa caccctgtac240

ctgcagatga actccctgag agccgaggac accgccgtgt actactgcac cagagatcac300

tccggctccg gcagctacta catcgattat tggggccagg gcaccctgggt caccgtttct360

tccgctagca ccaagggacc cagcgtgttc cctctggctc cttccagcaa gtctacctct420

ggcgggaacag ctgctctggg ctgcctgggtc aaggactact ttcctgagcc tgtgaccgtg480

tcctggaact ctggcgtct gacatctggc gtgcacacct ttccagctgt gctgcagtcc540
tccggcctgt actctctgtc ctctgtcgtg accgtgcctt ccagctctct gggaacccag600
acctacatct gcaatgtgaa ccacaagcct tccaacacca aggtggacaa gaaggtggaa660
cccaagtcct gcgacaagac ccacacctgt cctccatgtc ctgtccaga agctgctggc720
ggcccttccg tgtttctgtt ccctccaaag cctaaggaca ccctgatgat ctctcggacc780
cctgaagtga cctgcgtggg ggtggatgtg tctcacgagg acccagaagt gaagttcaat840
tggtacgtgg acggcgtgga agtgcacaac gccaagacca agcctagaga ggaacagtac900
ggctccacct acagagtggg gtccgtgctg acagtgtgc accaggattg gctgaacggc960
aaagagtaca agtgcaaggt gtccaacaag gccctgcctg ctctatcga aaagaccatc1020
tccaaggcca agggccagcc tagggaaccc caggtttaca cttgcctcc atctcgggac1080
gagctgacca agaaccaggt gtccctgtct tgcgtgtga agggcttcta cccctccgat1140
atgccgtgg aatgggagtc taatggccag cctgagaaca actacaagac aaccctcct1200
gtgctggact ccgacggctc attcttctg gtgtccaagc tgaccgtgga caagtctaga1260
tggcagcagg gcaacgtgtt ctctgcagc gtgatgcacg aggccctgca caatcactac1320
acacagaagt ctctgtctct gagccccggc aag1353

3- Secuencias

2

3- Identificador de la

2-1secuencia

2

3- Tipo de molécula

2- **AA**

2

3- Extensión

2- **451**

3

3- Características **source 1..451**

2- Localización/Califica **mol_type = protein**

4-1 dores

organism = synthetic construct

3- Residuos

2- QVQLVESGGG VVQPGGSLRL SCAASGFTFS SYGMHWVRQA PGKGLEWVAV IWYDGRNKYY60
5

ADSVKGRFTI SRDNSKNTLY LQMNSLRAED TAVYYCTRDH SGSGSYIDY WGQGTLVTVS120

SASTKGPSVF PLAPSSKSTS GGTAALGCLV KDYFPEPVTV SWNSGALTSG VHTFPAVLQS180

SGLYSLSSVV TTPSSSLGTQ TYICNVNHKP SNTKVDKKVE PKSCDKHTC PPCPAPEAAG240

GPSVFLFPPK PKDTLMISRT PEVTCVVVDV SHEDPEVKFN WYVDGVEVHN AKTKPREEQY300

GSTYRVVSVL TVLHQDWLNG KEYKCKVSNK ALPAPIEKTI SKAKGQPREP QVYTLPPSRD360

ELTKNQVSLV CAVKGFYPSD IAVEWESNGQ PENNYKTPPP VLDSGDSFLL VSKLTVDKSR420

WQQGNVFSCS VMHEALHNHY TQKSLSLSPG K451

3- Secuencias

3

3- Identificador de la

3-1 secuencia

3

3- Tipo de molécula

3- **DNA**

2

3- Extensión

3- **639**

3

3- Características **CDS 1..639**

3- Localización/Califica **protein_id = 4**

4-1 does

translation =

**EIAMTQSPATLSVSPGERATLSCRASQSVSSNLAWYQQKPGQAPRLLIYGASTRATGLPARFSGSGSGTEFTLTISLQSED
FAVYYCQQYNNFWTFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQES
VTEQDSKDSSTLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC**

3- Características **source 1..639**

3- Localización/Califica **mol_type = other DNA**

4- does

2 **organism = synthetic construct**

3- Residuos

3- gagattgcc tgcacagtc tccgccaca ctgtctgtta gccctggcga gagagctacc60
5

ctgtcctgta ggcctctca gtccgtgtcc tctaacctgg cctggatatca gcagaagcct120

ggacaggctc cccggctgtt gatctatggc gcttctacca gagctaccgg cctgcctgct180

agattctccg gctctggatc tggcaccgag ttaccctga ccatctccag cctgcagtcc240

gaggatttcg ccgtgtacta ctgccagcag tacaacaact tctggacctt cggccagggc300

accaagggtgg aaatcaagcg tacggtggcc gctccttccg tggtcatctt cccaccttcc360

gacgagcagc tgaagtccgg cacagcttct gtcgtgtgcc tgctgaacaa cttttaccct420

cgggaagcca aggtgcagtg gaaggtggac aatgccctgc agagcggcaa ctccaagag480
tctgtgaccg agcaggactc caaggacagc acctacagcc tgcctccac actgaccctg540
tccaaggccg actacgagaa gcacaaggtg tacgcctgcg aagtgaccca tcagggcctg600
tctagccctg tgaccaagtc ttcaaccgg ggcgagtg639

3- Secuencias

4

3- Identificador de la
4-1 secuencia **4**

3- Tipo de molécula
4- **AA**
2

3- Extensión
4- **213**
3

3- Características **source 1..213**
4- Localización/Califica
4-1 dores **mol_type = protein**
organism = synthetic construct

3- Residuos

4- EIAMTQSPAT LSVSPGERAT LSCRASQSVS SNLAWYQQKP GQAPRLLIYG ASTRATGLPA60
5
RFSGSGSGTE FTLTISSLQS EDFAVYYCQQ YNNFWTFGQG TKVEIKRTVA APSVFIFPPS120
DEQLKSGTAS VVCLLNNFYF REAKVQWKVD NALQSGNSQE SVTEQDSKDS TYSLSSTLTL180
SKADYEKHKV YACEVTHQGL SSPVTKSFNR GEC213

3- Secuencias

5

3- Identificador de la
5-1 secuencia

5

3- Tipo de molécula

5-

DNA

2

3- Extensión

5-

1458

3

3- Características

CDS 1..1458

5- Localización/Califica

4-1 does

protein_id = 6

translation =

EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNSYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLCRSSTGAVTTSNYANWVQQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTLSGAQPEDEAEYYCALW
YSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTK
NQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMHEALHNHYTQ
KSLSLSPGK

3- Características

source 1..1458

5- Localización/Califica

4- does

mol_type = other DNA

2

organism = synthetic construct

3- Residuos

5-
5 gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttgtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca agtacaacaa ttacgccacc180
tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtcgg300
cacggcaact tcggcaactc ctatgtgtct tggttgcct actggggcca gggcacactg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcacctga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcactcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actttgtctg gtgcccagcc tgaggatgag gctgagtact attgcgccct gtgtactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattgta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacggctc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aaggtgtcca acaaggcct gcctgtcct atcgaaga ccattctcaa ggccaagggc1140
cagcctaggg aacccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200

cagggtgtccc tgtggtgtct ggtcaagggc ttctaccctt ccgatatcgc cgtggaatgg1260
gagtctaattg gccagccaga gaacaactac aagacaaccc ctctgtgtct ggactccgac1320
ggctcattct ttctgtactc caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

6

3- Identificador de la
6-1 secuencia

6

3- Tipo de molécula

6-
2

AA

3- Extensión

6-
3

486

3- Características

source 1..486

6- Localización/Califica
4-1 dores

mol_type = protein

organism = synthetic construct

3- Residuos

6-
5

EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNSYVS WFAYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPLTVSPG GTVTLTCRSS TGAVTTSNYA180

NWVQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TLGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYGSTYR VVSVTLVHQ DWLNGKEYKC360
KVSNAKALPAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3-7Secuencias

3- Identificador de la
7-1secuencia **7**

3- Tipo de molécula
7- **DNA**
2

3- Extensión
7- **1353**
3

3- Características **CDS 1..1353**
7- Localización/Califica
4-1dores **protein_id = 8**

translation =

**QVQLVESGGGVVQPGGSLRLSCAASGFTFSSYGMHWVRQAPGKGLEWVAVIWYDGRNKYYADSVKGRFTISRDN
SKN
TLYLQMNSLRAEDTAVYYCTRDHSGSGSYIDYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPV
TVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKHTCPCPAPEA
AGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVTLVH
QDW
LNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLSCAVKGFYPSDIAVEWESNGQPENNYKT
T
PPVLDSGGSFFLVSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK**

3- Características **source 1..1353**

7- Localización/Califica **mol_type = other DNA**

4- dores

2 **organism = synthetic construct**

3- Residuos

7-
5 caggttcagc tggttgaatc tggcggcgga gttgttcagc ctggcggatc tctgagactg60
tcttgtgccg cctccggctt caccttctcc tcttacggaa tgcactgggt ccgacaggcc120
cctggcaaag gattggaatg ggtcgccgtg atttggtacg acggccggaa caagtactac180
gccgactccg tgaagggcag attcaccatc tctcgggaca actccaagaa caccctgtac240
ctgcagatga actccctgag agccgaggac accgccgtgt actactgcac cagagatcac300
tccggctccg gcagctacta catcgattat tggggccagg gcaccctggt caccgtttct360
tccgctagca ccaagggacc cagcgtgttc cctctggctc cttccagcaa gtctacctct420
ggcggaacag ctgctctggg ctgcctggtc aaggactact ttcctgagcc tgtgaccgtg480
tcctggaact ctggcgctct gacatctggc gtgcacacct ttccagctgt gctgcagtcc540
tccggcctgt actctctgtc ctctgtcgtg accgtgcctt ccagctctct gggaaccag600
acctacatct gcaatgtgaa ccacaagcct tocaacacca aggtggacaa gaaggtggaa660
cccaagtcct gcgacaagac ccacacctgt cctccatgtc ctgctccaga agctgctggc720
ggcccttccg tgtttctgtt ccctccaaag cctaaggaca ccctgatgat ctctcggacc780
cctgaagtga cctgcgtggg ggtggatgtg tctcacgagg acccagaagt gaagttcaat840
tggtacgtgg acggcgtgga agtgcacaac gccaaagacca agcctagaga ggaacagtac900
aactccacct acagagtggg gtccgtgctg acagtgtctg accaggattg gctgaacggc960
aaagagtaca agtgcaaggt gtccaacaag gccctggctg ctctatcga aaagaccatc1020

tccaaggcca agggccagcc tagggaaccc caggtttaca ccttgcctcc atctcgggac1080
gagctgacca agaaccaggt gtccctgtct tgcgctgtga agggcttcta cccctccgat1140
atcgccgtgg aatgggagtc taatggccag cctgagaaca actacaagac aaccctcct1200
gtgctggact ccgacggctc attcttctg gtgtccaagc tgaccgtgga caagtctaga1260
tggcagcagg gcaacgtgtt ctctgcagc gtgatgcacg aggccctgca caatcactac1320
acacagaagt ctctgtctct gagccccggc aag1353

3- Secuencias

8

3- Identificador de la
8-1 secuencia **8**

3- Tipo de molécula
8- **AA**
2

3- Extensión
8- **451**
3

3- Características **source 1..451**
8- Localización/Califica **mol_type = protein**
4-1 dores **organism = synthetic construct**

3- Residuos

8- QVQLVESGGG VVQPGGSLRL SCAASGFTFS SYGMHWVRQA PGKGLEWVAV IWYDGRNKYY60
5
ADSVKGRFTI SRDNSKNTLY LQMNSLRAED TAVYYCTRDH SGSGSYIDY WGQGTLVTVS120

SASTKGPSVF PLAPSSKSTS GGTAALGCLV KDYFPEPVTV SWNSGALTSG VHTFPAVLQS180
SGLYSLSSVV TVPSSSLGTQ TYICNVNHKP SNTKVDKKVE PKSCDKTHTC PPCAPEAAG240
GPSVFLFPPK PKDTLMISRT PEVTCVVVDV SHEDPEVKFN WYVDGVEVHN AKTKPREEQY300
NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK ALAAPIEKTI SKAKGQPREP QVYTLPPSRD360
ELTKNQVSLV CAVKGFYPSD IAVEWESNGQ PENNYKTPPP VLDSDGSFFL VSKLTVDKSR420
WQQGNVFSCS VMHEALHNHY TQKSLSLSPG K451

3- Secuencias

9

3- Identificador de la
9-1 secuencia

9

3- Tipo de molécula
9-
2

DNA

3- Extensión
9-
3

1335

3- Características
9- Localización/Califica
4-1 dores

CDS 1..1335

protein_id = 10

translation =

**QVQLQQWGAGLLKPSETLSLTCAVYGGSFSPYYWSWIRQPPGKLEWIGEINHSGSTNYNPSLKSRVTISVDTSKNQFSL
KLSSVTAADTAVYYCARRAGDFDYWGQGLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGA
LTSGVHTFPAVLQSSGLYSLSSVTVPSDDLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCAPEAAGGPSVFLF
PPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCK**

VSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLSCAVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGS
FFLVSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK

3- Características **source 1..1335**
9- Localización/Califica **mol_type = other DNA**
4- dores
2 **organism = synthetic construct**

3- Residuos

9-
5 caggttcagt tgcagcaatg gggcgctggc ctgctgaagc cttctgagac actgtctctg60
acctgcgctg tgtacggcgg ctccttctct ccttactact ggtcctggat ccggcagcct120
cctggcaaag gactggaatg gatcggcgag atcaaccact ccggctccac caactacaac180
cccagcctga agtccagagt gaccatctcc gtggacacct ccaagaacca gttctccctg240
aagctgtcct ccgtgaccgc tgctgatacc gccgtgtact actgtgctcg gagagccggc300
gacttcgatt attggggaca gggcacactg gtcaccgtgt cctctgctag caccaaggga360
ccctctgtgt tccctctggc tcctccagc aagtctacct ctggcggaac agctgctctg420
ggctgcctgg tcaaggacta ctttctgag cctgtgaccg tgtcttgga ctctggcgct480
ctgacatctg gcgtgcacac cttccagct gtgctgcagt cctccggcct gtactctctg540
tcctctgtcg tgaccgtgcc ttccagctct ctgggaaccc agacctacat ctgcaatgtg600
aaccacaagc cttccaacac caaggtggac aagaaggtgg aaccaagtc ctgcgacaag660
accacacct gtctccatg tcctgctcca gaagtgctg gcggcccttc cgtgtttctg720
ttccctcaa agcctaagga caccctgatg atctctcgga cccctgaagt gacctgcgtg780
gtggtggatg tgtctcacga ggatcccgaa gtgaagttca attggtacgt ggacggcgtg840
gaagtgcaca acgccaagac caagcctaga gaggaacagt acaactccac ctacagagt900

gtgtccgtgc tgaccgtgct gcaccaggat tggctgaacg gcaaagagta caagtgcaag960
 gtgtccaaca aggccctggc cgctcctatc gaaaagacca tcagcaaggc caagggccag1020
 cctagggaac cccaggttta cacctgcct ccatctcggg acgagctgac caagaatcag1080
 gtgtccctgt cctgtgccgt gaagggcttc tacccttccg atatcgccgt ggaatgggag1140
 agcaatggcc agcctgagaa caactacaag acaaccctc ctgtgctgga ctccgacggc1200
 tcattcttcc tgggtgtcaa gctgacagtg gacaagtcca gatggcagca gggcaacgtg1260
 ttctcctgca gcgtgatgca cgaggccctg cacaatcact acaccagaa gagtctgtct1320
 ctgtcccctg gcaag1335

3- Secuencias

10

3- Identificador de la
 10 secuencia
 -1

10

3- Tipo de molécula
 10
 -2

AA

3- Extensión
 10
 -3

445

3- Características
 10 Localización/Califica
 -4- dores

source 1..445

mol_type = protein

1

organism = synthetic construct

3- Residuos

10 QVQLQQWGAG LLKPSETLSL TCAVYGGSFY PYYWSWIRQP PGKGLEWIGE INHSGSTNYN60
-5 PSLKSRVTIS VDTSKNQFSL KLSSVTAADT AVYYCARRAG DFDYWGQGTL VTVSSASTKG120
PSVFPLAPSS KSTSGGTAAL GCLVKDYFPE PVTVSWNSGA LTSGVHTFPA VLQSSGLYSL180
SSVVTVPSSS LGTQTYICNV NHKPSNTKVD KKVEPKSCDK THTCPPCPAP EAAGGPSVFL240
FPPKPKDTLM ISRTPEVTCV VVDVSHEDPE VKFNWYVDGV EVHNAKTKPR EEQYNSTYRV300
VSVLTVLHQD WLNGKEYKCK VSNKALAAPI EKTISKAKGQ PREPQVYTLPSRDELTKNQ360
VSLSCAVKGF YPSDIAVEWE SNGQPENNYK TTPPVLDSDG SFFLVSKLTV DKSRWQQGNV420
FSCSVMHEAL HNHYTQKSLS LSPGK445

3- Secuencias

11

3- Identificador de la

11 secuencia **11**

-1

3- Tipo de molécula

11 **DNA**

-2

3- Extensión

11 **636**

-3

3- Características **CDS 1..636**

11 Localización/Califica
dores **protein_id = 12**

-4- translation =
1 DIQMTQSPSTLSASVGDRVTITCRASQSISSWLAWYQQKPGKAPKLLIYKASSLESGVPSRFSGSGSGTEFTLTISLQPDD
FATYYCQQYNSYIFGQGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTE
QDSKDYSLSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

3- Características source 1..636

11 Localización/Califica mol_type = other DNA

-4- does

2 organism = synthetic construct

3- Residuos

11
-5 gacatccaga tgacccagtc tccatccaca ctgtccgcct ctgtgggcga cagagtgacc60
atcacctgtc gggcctctca gtccatctct tcttggtgg cctggtatca gcagaagcct120
ggcaaggctc ccaagctgct gatctacaag gcctcctctc tggaatccgg cgtgccctct180
agattctccg gctctggatc tggcaccgag ttaccctga caatctccag cctgcagcct240
gacgacttcg ccacctacta ctgccagcag tacaactcct acatcttcgg ccagggcacc300
aagctggaaa tcaagcgtag ggtggccgct ccttccgtgt tcatcttccc accttccgac360
gagcagctga agtccggcac agcttctgtc gtgtgcctgc tgaacaactt ctaccctcgg420
gaagccaagg tgcagtggaa ggtggacaat gccctgcagt ccggcaactc ccaagagtct480
gtgaccgagc aggactccaa ggacagcacc tacagcctgt cctccacact gaccctgtcc540
aaggccgact acgagaagca caaggtgtac gcctgcgaag tgacctatca gggcctgtct600
agccctgtga ccaagtcttt caaccggggc gagtgc636

3- Secuencias

12

3- Identificador de la
12 secuencia
-1

12

3- Tipo de molécula
12
-2

AA

3- Extensión
12
-3

212

3- Características
12 Localización/Califica
-4- dores

source 1..212

mol_type = protein

1

organism = synthetic construct

3- Residuos

12
-5 DIQMTQSPST LSASVGDRVT ITCRASQSI SWLAWYQQKP GKAPKLLIYK ASSLESGVPS60

RFSGSGSGTE FTLTISSLQP DDFATYYCQQ YNSYIFGQGT KLEIKRTVAA PSVFIFPPSD120

EQLKSGTASV VCLLNIFYPR EAKVQWKVDN ALQSGNSQES VTEQDSKDST YLSSTLTLS180

KADYEKHKVY ACEVTHQGLS SPVTKSFNRG EC212

3- Secuencias

13

3- Identificador de la
13 secuencia
-1

13

3- Tipo de molécula

13 **DNA**

-2

3- Extensión

13 **1458**

-3

3- Características **CDS 1..1458**

13 Localización/Califica **protein_id = 14**

-4- does

1 **translation =**
EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGDDYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLCRSSTGAVTTSNYANWVQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTLSGAQPEDEAEYYCALW
YSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDEL
TKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSV MHEALHNHYT
QKSLSLSPGK

3- Características **source 1..1458**

13 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

13 **gaagtcgagc tgggtgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60**
-5 **tcttggtgccg cctctggctt cacctcaac acctacgcc tgaactgggt ccgacaggct120**
cctggcaaag gcctggaatg ggtcgcccg atcagatcca agtacaacaa ttacgccacc180
tactacgccg actccgtgaa ggaccggtc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300

cacggcaact tcggcgacga ctatgtgtct tggtttgct actggggcca gggcacactg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcacctga cactgacctg tagatottct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcactcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actttgtctg gtgcccagcc tgaggatgag gctgagtact attgcgccct gtggtactcc720
aacctgtggg tttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattgta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aagggtcca acaaggcct ggctgctct atcgaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
cagggtgtcc tgtggtgtct ggtcaagggc ttctaccct ccgatatgc cgtggaatgg1260
gagtctaag gccagccaga gaacaactac aagacaacc ctctgtgct ggactccgac1320
ggctcattct ttctgtact caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

14

3- Identificador de la

14 secuencia **14**

-1

3- Tipo de molécula

14 **AA**

-2

3- Extensión

14 **486**

-3

3- Características **source 1..486**

14 Localización/Califica **mol_type = protein**

-4- dores

1 **organism = synthetic construct**

3- Residuos

14 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60

-5

YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGDDYVS WFAYWGQGTL120

VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180

NWWQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TLGAQPEDE AEYYCALWYS240

NLWVFGGGTK VTVLEPKSSD KHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300

VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360

KVSNKALAAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420

ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480

3- Secuencias**15**

3- Identificador de la

15 secuencia **15**

-1

3- Tipo de molécula

15 **DNA**

-2

3- Extensión

15 **1458**

-3

3- Características **CDS 1..1458**15 Localización/Califica **protein_id = 16**

-4- does

1 **translation =**
EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATEYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNSYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTILCRSSTGAVTTSNYANWVQQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTISGAQPEDEAEYYCALW
YSNLWVFGGGTKVTVLEPKSSDKTHCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDELT
KNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT
QKSLSLSPGK

3- Características **source 1..1458**15 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

15

-5

gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttgtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca agtacaacaa ttacgccacc180
gagtacgccg actccgtgaa ggacagattc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300
cacggcaact tcggcaactc ctatgtgtct tggttgcct actggggcca gggcacactg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcacctga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcaactctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actatctctg gtgcccagcc tgaggatgag gctgagtact attgcgcct gtggtactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattgta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aagggtcca acaaggcct ggctgctct atcgaaga ccattccaa ggccaagggc1140
cagcctaggg aacccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200

caggtgtccc tgtggtgtct ggtcaagggc ttctaccctt ccgatatcgc cgtggaatgg1260
gagtctaata gccagccaga gaacaactac aagacaaccc ctctgtgtct ggactccgac1320
ggctcattct ttctgtactc caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

16

3- Identificador de la
16 secuencia

16

-1

3- Tipo de molécula

16

AA

-2

3- Extensión

16

486

-3

3- Características

source 1..486

16 Localización/Califica

mol_type = protein

-4- dores

1

organism = synthetic construct

3- Residuos

16

-5 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60

EYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNSYVS WFAYWGQGTL120

VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWVQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TISGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KTHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVS NKALAAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

17

3- Identificador de la
17 secuencia
-1

17

3- Tipo de molécula
17
-2

DNA

3- Extensión
17
-3

1458

3- Características
17 Localización/Califica
-4- dores
1

CDS 1..1458

protein_id = 18

translation =

EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNDYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLTCRSSTGAVTTSNYANWVQQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTLSGAQPEDEADYYCAL

WYSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDE
LTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNNH
YTQKSLSLSPGK

3- Características **source 1..1458**

17 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

17
-5 gaagtcagc tgggtgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttggtccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca agtacaacaa ttacgccacc180
tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300
cacggcaact tcggcaacga ctatgtgtct tggtttgctt actggggcca gggcacactg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtgggtacc caagagcctt ctctgacagt gtctcctggc480
ggcacctga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcaactctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actttgtctg gtgcccagcc tgaggatgag gctgattact attgcgccct gtgttactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840

ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattggta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaa agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aaggtgtcca acaaggccct ggctgtctct atcgaaaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
caggtgtccc tgtggtgtct ggtcaagggc ttctaccct ccgatatcgc cgtggaatgg1260
gagtctaag gccagccaga gaacaactac aagacaacc ctcctgtgct ggactccgac1320
ggctcattct ttctgtact caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

18

3- Identificador de la
18 secuencia
-1

18

3- Tipo de molécula
18
-2

AA

3- Extensión
18
-3

486

3- Características **source 1..486**

18 Localización/Califica **mol_type = protein**

-4- does

1 **organism = synthetic construct**

3- Residuos

18 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
-5 YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNDYVS WFAYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWWQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TLGAQPEDE ADYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVSNAKALAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

19

3- Identificador de la

19 secuencia **19**

-1

3- Tipo de molécula

19 **DNA**

-2

3- Extensión

19 **1458**

-3

3- Características **CDS 1..1458**

19 Localización/Califica **protein_id = 20**

-4- does

1 **translation =**

**EVQLVESGGGLIQPGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGDSYVSWFDYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLTCSRSTGAVTTSNYANWVQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTLSGAQPEDEAEYYCALW
YSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDEL
KNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT
QKSLSLSPGK**

3- Características **source 1..1458**

19 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

19 *gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60*

-5 *tcttgtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120*

cctggcaaag gcctggaatg ggtcgcccg atcagatcca agtacaacaa ttacgccacc180

tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240

ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300

cacggcaact tcggcgactc ctatgtgtct tggtttgact actggggcca gggcaccctg360

gtcacagtgt cctctggaaa gcctggctct ggcaagccc gatctggaaa accaggctcc420

ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcaccgtga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcactcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actttgtctg gtgcccagcc tgaggatgag gctgagtact attgcgccct gtggtactcc720
aacctgtggg tttcggcgg tggcaccaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattggta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aagggtcca acaaggcct ggctgctct atcgaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
caggtgtccc tgtggtgtct ggtcaagggc ttctaccct ccgatatcg cgtggaatgg1260
gagtctaag gccagccaga gaacaactac aagacaacc ctcctgtgct ggactccgac1320
ggctcattct ttctgtact caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

3- Identificador de la
20 secuencia
-1

20

3- Tipo de molécula
20
-2

AA

3- Extensión
20
-3

486

3- Características
20 Localización/Califica
-4- dores

source 1..486

mol_type = protein

1

organism = synthetic construct

3- Residuos

20
-5

EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGDSYVS WFDYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWWQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TLGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VSVLTVLHQ DWLNGKEYKC360
KVSNAKALAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

21

3- Identificador de la

21 secuencia **21**

-1

3- Tipo de molécula

21 **DNA**

-2

3- Extensión

21 **1458**

-3

3- Características **CDS 1..1458**

21 Localización/Califica **protein_id = 22**

-4- does

1 **translation =**
EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNDYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPLTVS
PGGTVTLTCRSSTGAVTTSNYANWVQKPGQAPRGLIGGTNKRAPGVPARFSGSLLGDKAALTLSGAQPEDEAEYYCAL
WYSNLWVFGGGTKVTVLEPKSSDKTHCPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDE
LTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNH
YTQKSLSLSPGK

3- Características **source 1..1458**

21 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

21

-5

gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttgtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca agtacaacaa ttacgccacc180
tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtcgcg300
cacggcaact tcggcaacga ctatgtgtct tggtttcct actggggcca gggcacactg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcacctga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcgtgcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actttgtctg gtgcccagcc tgaggatgag gctgagtact attgcgccct gtgtactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattgta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aagggtcca acaaggcctt ggctgctcct atcgaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200

caggtgtccc tgtggtgtct ggtcaagggc ttctaccctt ccgatatcgc cgtggaatgg1260
gagtctaata gccagccaga gaacaactac aagacaacct ctctgtgtct ggactccgac1320
ggctcattct ttctgtactc caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

22

3- Identificador de la
22 secuencia

22

-1

3- Tipo de molécula

22

AA

-2

3- Extensión

22

486

-3

3- Características

source 1..486

22 Localización/Califica

mol_type = protein

-4- dores

1

organism = synthetic construct

3- Residuos

22

-5

EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNDYVS WFAYWGQGTL120

VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWVQQKPGQA PRGLIGGTNK RAPGVPARFS GSLLGDKAAL TLGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPCPCA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVS NKALAAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

23

3- Identificador de la
23 secuencia
-1

23

3- Tipo de molécula
23
-2

DNA

3- Extensión
23
-3

1458

3- Características
23 Localización/Califica
-4- dores
1

CDS 1..1458

protein_id = 24

translation =

EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNSYVSWFDYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLTCRSSTGAVTTSNYANWVQQKPGQAPRGLIGGTNKRAPGVPARFSGSLLGDKAALTLSGAQPEDEAEYYCAL

WYSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW
YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDE
LTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNNH
YTQKSLSLSPGK

3- Características **source 1..1458**

23 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

23
-5 gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttggtccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca agtacaacaa ttacgccacc180
tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300
cacggcaact tcggcaactc ctatgtgtct tggtttgact actggggcca gggcaccctg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtgggtacc caagagcctt ctctgacagt gtctcctggc480
ggcaccgtga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcgtgcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actttgtctg gtgcccagcc tgaggatgag gctgagtact attgcgccct gtgtgtactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840

ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattggta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaa agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aaggtgtcca acaaggccct ggctgtctct atcgaaaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
caggtgtccc tgtggtgtct ggtcaagggc ttctaccct ccgatatcgc cgtggaatgg1260
gagtctaag gccagccaga gaacaactac aagacaacc ctcctgtgct ggactccgac1320
ggctcattct ttctgtact caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

24

3- Identificador de la
24 secuencia
-1

24

3- Tipo de molécula
24
-2

AA

3- Extensión
24
-3

486

3- Características **source 1..486**

24 Localización/Califica **mol_type = protein**

-4- does

1 **organism = synthetic construct**

3- Residuos

24
-5 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNSYVS WFDYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWWQQKPGQA PRGLIGGTNK RAPGVPARFS GSLLGDKAAL TLGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVSNAKALAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

25

3- Identificador de la

25 secuencia **25**

-1

3- Tipo de molécula

25 **DNA**

-2

3- Extensión

25 **1458**

-3

3- Características **source 1..1458**

25 Localización/Califica **mol_type = other DNA**

-4- does

1 **organism = synthetic construct**

3- Características **CDS 1..1458**

25 Localización/Califica **protein_id = 26**

-4- does

2 **translation =**

**EVQLVESGGGLIQPGGSLRLSCAASGFTFSDHAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKS
TLYLQMNNLRAEDTAVYYCVRHGNFGNSYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSQAVVTQEPSLTV
SPGGTVTLTCRSSTGAVTTSNYANWVQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTISGAQPEDEAEYYCAL
WYSNLWVFGGGTKVTVLEPKSSDKTHCPCPAPEAAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDE
LTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVVFSCSVMHEALHNH
YTQKSLSLSPGK**

3- Residuos

25 *gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60*

-5

tcttgtagccg cctctggctt caccttctct gaccacgcca tgaactgggt ccgacaggct120

cctggcaaag gcctggaatg ggtcgcccg atcagatcca agtacaacaa ctacgccacc180

tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240

ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300

cacggcaact tcggcaactc ctatgtgtct tggtttcct actggggcca gggcacactg360

gtcacagtgt cctctggaaa gcctggctct ggcaagccc gatctggaaa accaggctcc420

ggaaaacctg gcagccaggc cgtggttacc caagagccta gtctgacagt gtctcctggc480
ggcaccgtga cactgacctg tagatcttct accggcgctg tgaccacctc caattacgcc540
aattgggtgc agcagaagcc cggccaagct cctagaggac tgatcggagg caccaacaag600
agagcccctg gcactcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
acaatctctg gtgcccagcc tgaggatgag gctgagtact attgcgccct gtggtactcc720
aacctgtggg tttcggcgg tggcaccaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
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gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
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aagggtcca acaaggcct ggctgctct atcgaaaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
caggtgtccc tgtggtgtct ggtcaagggc ttctaccct ccgatatgc cgtggaatgg1260
gagtctaag gccagccaga gaacaactac aagacaacc ctcctgtgct ggactccgac1320
ggctcattct ttctgtact caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

3- Identificador de la
26 secuencia
-1

26

3- Tipo de molécula
26
-2

AA

3- Extensión
26
-3

486

3- Características
26 Localización/Califica
-4- dores

source 1..486

mol_type = protein

1

organism = synthetic construct

3- Residuos

26
-5

EVQLVESGGG LIQPGGSLRL SCAASGFTFS DHAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNSYVS WFAYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWWQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TISGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KTHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VSVLTVLHQ DWLNGKEYKC360
KVSNAKALAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

27

3- Identificador de la

27 secuencia **27**

-1

3- Tipo de molécula

27 **DNA**

-2

3- Extensión

27 **1458**

-3

3- Características **CDS 1..1458**

27 Localización/Califica **protein_id = 28**

-4- does

1 **translation =**
EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKANNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNSYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLTCRSSTGAVTTSNYANWVQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTISGAQPEDEAEYYCALW
YSNLWVFGGGTKVTVLEPKSSDKTHTCPPCAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDEL
KNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT
QKSLSLSPGK

3- Características **source 1..1458**

27 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

27

-5

gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttgtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca aggccaacaa ttacgccacc180
tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtcgg300
cacggcaact tcggcaactc ctatgtgtct tggttgcct actggggcca gggcacactg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcacctga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcactcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actatctctg gtgcccagcc tgaggatgag gctgagtact attgcgcct gtggtactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattgta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aagggtcca acaaggcct ggctgctcct atcgaaga ccatcagcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200

caggtgtccc tgtggtgtct ggtcaagggc ttctaccctt ccgatatcgc cgtggaatgg1260
gagtctaata gccagccaga gaacaactac aagacaacct ctctgtgtct ggactccgac1320
ggctcattct ttctgtactc caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

28

3- Identificador de la
28 secuencia

28

-1

3- Tipo de molécula
28

AA

-2

3- Extensión
28

486

-3

3- Características
28 Localización/Califica

source 1..486

-4- dores

mol_type = protein

1

organism = synthetic construct

3- Residuos

28

-5

EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKANNYAT60
YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNSYVS WFAYWGQGTL120

VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWVQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TISGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPCPCA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVS NKALAAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

29

3- Identificador de la
29 secuencia
-1

29

3- Tipo de molécula
29
-2

DNA

3- Extensión
29
-3

1458

3- Características
29 Localización/Califica
-4- dores
1

CDS 1..1458

protein_id = 30

translation =

EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATSYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNSYVSWFAYWGQGT LVT VSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLTCRSSTGAVTTSNYANWVQQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTISGAQPEDEAEYYCALW

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3- Características **source 1..1458**

29 Localización/Califica **mol_type = other DNA**

-4- dores

2 **organism = synthetic construct**

3- Residuos

29
-5 gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttggtccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca agtacaacaa ttacgccacc180
tcctacgccg actccgtgaa ggacagattc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300
cacggcaact tcggcaactc ctatgtgtct tggtttgctt actggggcca gggcacactg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcacctgta cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcaactctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actatctctg gtgcccagcc tgaggatgag gctgagtact attgcgccct gtgtactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840

ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtgggtgggtg atgtgtctca cgaggacca gaagtgaagt tcaattggta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aaggtgtcca acaaggccct ggctgtctct atcgaaaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
caggtgtccc tgtggtgtct ggtcaagggc ttctaccct ccgatatcgc cgtggaatgg1260
gagtctaag gccagccaga gaacaactac aagacaacc ctcctgtgct ggactccgac1320
ggctcattct ttctgtactc caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

30

3- Identificador de la
30 secuencia
-1

30

3- Tipo de molécula
30
-2

AA

3- Extensión
30
-3

486

3- Características **source 1..486**

30 Localización/Califica **mol_type = protein**

-4- does

1 **organism = synthetic construct**

3- Residuos

30
-5 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
SYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNSYVS WFAYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWWQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TISGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVSNAKALAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

31

3- Identificador de la

31 secuencia **31**

-1

3- Tipo de molécula

31 **DNA**

-2

3- Extensión

31 **1458**

-3

3- Características **CDS 1..1458**

31 Localización/Califica **protein_id = 32**

-4- does

1 **translation =**

**EVQLVESGGGLIQPGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNEYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLTCSRSTGAVTTSNYANWVQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTISGAQPEDEAEYYCALW
YSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDEL
KNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT
QKSLSLSPGK**

3- Características **source 1..1458**

31 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

31 gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60

-5 tcttggtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120

cctggcaaag gcctggaatg ggtcgcccg atcagatcca agtacaacaa ttacgccacc180

tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240

ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300

cacggcaact tcggcaacga gtatgtgtct tggtttgctt actggggcca gggcacactg360

gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420

ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcaccgtga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagccccctg gcactcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actatctctg gtgcccagcc tgaggatgag gctgagtact attgcgcctt gtggtactcc720
aacctgtggg tttcggcgg tggcaccaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattggta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aagggtcca acaaggcctt ggctgctcct atcgaaaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
caggtgtccc tgtggtgtct ggtcaagggc ttctaccctt ccgatatcgc cgtggaatgg1260
gagtctaag gccagccaga gaacaactac aagacaacct ctctgtgct ggactccgac1320
ggctcattct ttctgtactc caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

3- Identificador de la
32 secuencia
-1

32

3- Tipo de molécula
32
-2

AA

3- Extensión
32
-3

486

3- Características
32 Localización/Califica
-4- dores

source 1..486

mol_type = protein

1

organism = synthetic construct

3- Residuos

32
-5 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNEYVS WFAYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWWQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TISGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVSNAKALAAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

33

3- Identificador de la

33 secuencia **33**

-1

3- Tipo de molécula

33 **DNA**

-2

3- Extensión

33 **1458**

-3

3- Características **CDS 1..1458**

33 Localización/Califica
-4- dores **protein_id = 34**

1 **translation =**

**EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNDYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLTCRSSTGAVTTSNYANWVQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTISGAQPEDEAEYYCALW
YSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDELT
KNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT
QKSLSLSPGK**

3- Características **source 1..1458**

33 Localización/Califica
-4- dores **mol_type = other DNA**

2 **organism = synthetic construct**

3- Residuos

33

-5

gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttgtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca agtacaacaa ttacgccacc180
tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtcgcg300
cacggcaact tcggcaacga ctatgtgtct tggtttcct actggggcca gggcacactg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcacctga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcactcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actatctctg gtgcccagcc tgaggatgag gctgagtact attgcgcct gtggtactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttccctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattgta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aagggtcca acaaggcct ggctgctcct atcgaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200

caggtgtccc tgtggtgtct ggtcaagggc ttctaccctt ccgatatcgc cgtggaatgg1260
gagtctaata gccagccaga gaacaactac aagacaaccc ctctgtgtct ggactccgac1320
ggctcattct ttctgtactc caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

34

3- Identificador de la

34 secuencia **34**

-1

3- Tipo de molécula

34 **AA**

-2

3- Extensión

34 **486**

-3

3- Características **source 1..486**

34 Localización/Califica **mol_type = protein**

-4- dores

1 **organism = synthetic construct**

3- Residuos

34 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60

-5

YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNDYVS WFAYWGQGTL120

VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWVQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TISGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPCPCA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVS NKALAAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

35

3- Identificador de la
35 secuencia
-1

35

3- Tipo de molécula
35
-2

DNA

3- Extensión
35
-3

1458

3- Características
35 Localización/Califica
-4- dores
1

CDS 1..1458

protein_id = 36

translation =

EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNSYVSWFDYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLTCRSSTGAVTTSNYANWVQQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTISGAQPEDEAEYYCALW

YSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGEVHNAAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDEL
KNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT
QKSLSLSPGK

3- Características **source 1..1458**

35 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

35
-5 gaagtgcagc tgggtgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttggtccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca agtacaacaa ttacgccacc180
tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300
cacggcaact tcggcaactc ctatgtgtct tggtttgact actggggcca gggcaccctg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtgggtacc caagagcctt ctctgacagt gtctcctggc480
ggcaccgtga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcaactctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actatctctg gtgcccagcc tgaggatgag gctgagtact attgcgccct gtgtactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840

ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtgggtgggtg atgtgtctca cgaggacca gaagtgaagt tcaattggta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aaggtgtcca acaaggccct ggctgtctct atcgaaaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
caggtgtccc tgtggtgtct ggtcaagggc ttctaccct ccgatatcgc cgtggaatgg1260
gagtctaag gccagccaga gaacaactac aagacaacc ctcctgtgct ggactccgac1320
ggctcattct ttctgtact caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

36

3- Identificador de la

36 secuencia **36**

-1

3- Tipo de molécula

36 **AA**

-2

3- Extensión

36 **486**

-3

3- Características **source 1..486**

36 Localización/Califica **mol_type = protein**

-4- does

1 **organism = synthetic construct**

3- Residuos

36
-5 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNSYVS WFDYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWWQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TISGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVSNAKALAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVSMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

37

3- Identificador de la

37 secuencia **37**

-1

3- Tipo de molécula

37 **DNA**

-2

3- Extensión

37 **1458**

-3

3- Características **CDS 1..1458**

37 Localización/Califica **protein_id = 38**

-4- does

1 **translation =**

**EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNEYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLCRSSTGAVTTSNYANWVQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTLSGAQPEDEADYYCAL
WYSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDE
LTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMHEALHNH
YTQKSLSLSPGK**

3- Características **source 1..1458**

37 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

37 gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60

-5 tcttgtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120

cctggcaaag gcctggaatg ggtcgcccg atcagatcca agtacaacaa ttacgccacc180

tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240

ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300

cacggcaact tcggcaacga gtatgtgtct tggtttgctt actggggcca gggcacactg360

gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420

ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcaccgtga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagccccctg gcactcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actttgtctg gtgcccagcc tgaggatgag gctgattact attgcgcctt gtggtactcc720
aacctgtggg tttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttccctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattggta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aagggtcca acaaggcctt ggctgctcct atcgaaaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
caggtgtccc tgtggtgtct ggtcaagggc ttctaccct ccgatatcgc cgtggaatgg1260
gagtctaag gccagccaga gaacaactac aagacaacct ctctgtgct ggactccgac1320
ggctcattct ttctgtactc caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

3- Identificador de la
38 secuencia
-1

38

3- Tipo de molécula
38
-2

AA

3- Extensión
38
-3

486

3- Características
38 Localización/Califica
-4- dores

source 1..486

mol_type = protein

1

organism = synthetic construct

3- Residuos

38
-5

EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNEYVS WFAYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWWQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TLGAQPEDE ADYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VSVLTVLHQ DWLNGKEYKC360
KVSNAKALAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

39

3- Identificador de la

39 secuencia **39**

-1

3- Tipo de molécula

39 **DNA**

-2

3- Extensión

39 **1458**

-3

3- Características **CDS 1..1458**

39 Localización/Califica **protein_id = 40**

-4- does

1 **translation =**
EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNSYVSWFDYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLTCRSSTGAVTTSNYANWVQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTLSGAQPEDEADYYCAL
WYSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDE
LTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNH
YTQKSLSLSPGK

3- Características **source 1..1458**

39 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

39

-5

gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttgtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca agtacaacaa ttacgccacc180
tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300
cacggcaact tcggcaactc ctatgtgtct tggtttgact actggggcca gggcaccctg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcacctga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcactcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actttgtctg gtgcccagcc tgaggatgag gctgattact attgcgccct gtggtactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgttt840
ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattgta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aaggtgtcca acaaggcctt ggctgctcct atcgaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200

caggtgtccc tgtggtgtct ggtcaagggc ttctaccctt ccgatatcgc cgtggaatgg1260
gagtctaatt gccagccaga gaacaactac aagacaaccc ctctgtgtct ggactccgac1320
ggctcattct ttctgtactc caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

40

3- Identificador de la

40 secuencia **40**

-1

3- Tipo de molécula

40 **AA**

-2

3- Extensión

40 **486**

-3

3- Características **source 1..486**

40 Localización/Califica **mol_type = protein**

-4- dores

1 **organism = synthetic construct**

3- Residuos

40 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60

-5

YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNSYVS WFDYWGQGTL120

VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWVQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TLGAQPEDE ADYYCALWYS240
NLWVFGGKTK VTVLEPKSSD KTHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVS NKALAAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

41

3- Identificador de la
41 secuencia
-1

41

3- Tipo de molécula
41
-2

DNA

3- Extensión
41
-3

1458

3- Características
41 Localización/Califica
-4- dores
1

CDS 1..1458

protein_id = 42

translation =

EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNDYVSWFAYWGQGLTVTVSSGKPGSGKPGSGKPGSGKPGSQAVVTQEPSLTVS
PGGTVTLTCRSSTGAVTTSNYANWVQQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTLSGAQPEDEAEYYCALW

YSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDEL
KNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT
QKSLSLSPGK

3- Características **source 1..1458**

41 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

41
-5 gaagtgcagc tgggtgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60
tcttgtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120
cctggcaaag gcctggaatg ggtcgcccgg atcagatcca agtacaacaa ttacgccacc180
tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240
ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300
cacggcaact tcggcaacga ctatgtgtct tggtttgctt actggggcca gggcacactg360
gtcacagtgt cctctggaaa gcctggctct ggcaagcccg gatctggaaa accaggctcc420
ggaaaacctg gcagccaggc cgtgggtacc caagagcctt ctctgacagt gtctcctggc480
ggcacctgta cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagcccctg gcaactctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actttgtctg gtgcccagcc tgaggatgag gctgagtact attgcgccct gtggtactcc720
aacctgtggg ttttcggcgg tggcaccaaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttocgtgtt840

ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
 gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattggta cgtggacggc960
 gtggaagtgc acaacgcaa gaccaagcct agagaggaa agtacaactc cacctacaga1020
 gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
 aaggtgtcca acaaggccct ggctgtctct atcgaaaaga ccatctcaa ggccaagggc1140
 cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
 caggtgtccc tgtggtgtct ggtcaagggc ttctaccct ccgatatcgc cgtggaatgg1260
 gagtctaag gccagccaga gaacaactac aagacaacc ctcctgtgct ggactccgac1320
 ggctcattct ttctgtact caagctgacc gtggacaagt ccagatggca gcagggaac1380
 gtgttctcct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
 tctctgtccc ctggcaag1458

3- Secuencias

42

3- Identificador de la
 42 secuencia
 -1

42

3- Tipo de molécula
 42
 -2

AA

3- Extensión
 42
 -3

486

3- Características **source 1..486**

42 Localización/Califica **mol_type = protein**

-4- does

1 **organism = synthetic construct**

3- Residuos

42 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
-5 YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNDYVS WFAYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWWQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TLGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ DWLNGKEYKC360
KVSNAKALAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

43

3- Identificador de la

43 secuencia **43**

-1

3- Tipo de molécula

43 **DNA**

-2

3- Extensión

43 **1458**

-3

3- Características **CDS 1..1458**

43 Localización/Califica **protein_id = 44**

-4- does

1 **translation =**

**EVQLVESGGGLIQPGGSLRLSCAASGFTFNTYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKST
LYLQMNNLRAEDTAVYYCVRHGNFGNSYVSWFDYWGQGLTVTVSSGKPGSGKPGSGKPGSQAVVTQEPLTVS
PGGTVTLTCSRSTGAVTTSNYANWVQKPGQAPRGLIGGTNKRAPGTPARFSGSLLGDKAALTLSGAQPEDEAEYYCALW
YSNLWVFGGGTKVTVLEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALAAPIEKTISKAKGQPREPQVYTLPPSRDEL
KNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT
QKSLSLSPGK**

3- Características **source 1..1458**

43 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

43 *gaagtgcagc tggttgaatc tggcggcgga ctgattcagc ctggcggatc tctgagactg60*

-5 *tcttgtgccg cctctggctt caccttcaac acctacgcca tgaactgggt ccgacaggct120*

cctggcaaag gcctggaatg ggtcgcccg atcagatcca agtacaacaa ttacgccacc180

tactacgccg actccgtgaa ggaccgggtc accatctctc gggacgactc caagagcacc240

ctgtacctgc agatgaacaa cctgagagcc gaggacaccg ccgtgtacta ctgtgtgcgg300

cacggcaact tcggcaactc ctatgtgtct tggtttgact actggggcca gggcaccctg360

gtcacagtgt cctctggaaa gcctggctct ggcaagccc gatctggaaa accaggctcc420

ggaaaacctg gcagccaggc cgtggttacc caagagcctt ctctgacagt gtctcctggc480
ggcaccgtga cactgacctg tagatcttct accggcgctg tgaccacctc caactacgcc540
aattgggtgc agcagaagcc tggacaggca cccagaggac tgatcggagg caccaacaag600
agagccccctg gcactcctgc cagattctct ggatctctgc tgggcgataa ggccgctctg660
actttgtctg gtgcccagcc tgaggatgag gctgagtact attgcgccct gtggtactcc720
aacctgtggg tttcggcgg tggcaccaa gtgaccgtgc tggaacctaa gtcctccgac780
aagaccaca cctgtcctcc atgtcctgct ccagaagctg ctggcggccc ttccgtgtt840
ctgttcctc caaagcctaa ggacaccctg atgatctctc ggaccctga agtgacctgc900
gtggtggtgg atgtgtctca cgaggacca gaagtgaagt tcaattggta cgtggacggc960
gtggaagtgc acaacgcaa gaccaagcct agagaggaac agtacaactc cacctacaga1020
gtggtgtccg tgctgacagt gctgcaccag gattggctga acggcaaaga gtacaagtgc1080
aagggtcca acaaggcct ggctgctct atcgaaaaga ccatctcaa ggccaagggc1140
cagcctaggg aaccccaggt ttacacctg cctccaagca gggacgagct gaccaagaac1200
caggtgtccc tgtggtgtct ggtcaagggc ttctaccct ccgatatcgc cgtggaatgg1260
gagtctaag gccagccaga gaacaactac aagacaacct ctctgtgct ggactccgac1320
ggctcattct ttctgtact caagctgacc gtggacaagt ccagatggca gcagggaac1380
gtgttctct gcagcgtgat gcacgaggcc ctgcacaatc actacacaca gaagtcctg1440
tctctgtccc ctggcaag1458

3- Secuencias

3- Identificador de la
44 secuencia
-1

44

3- Tipo de molécula
44
-2

AA

3- Extensión
44
-3

486

3- Características
44 Localización/Califica
-4- dores

source 1..486

mol_type = protein

1

organism = synthetic construct

3- Residuos

44
-5 EVQLVESGGG LIQPGGSLRL SCAASGFTFN TYAMNWVRQA PGKGLEWVAR IRSKYNNYAT60
YYADSVKDRF TISRDDSKST LYLQMNNLRA EDTAVYYCVR HGNFGNSYVS WFDYWGQGTL120
VTVSSGKPGS GKPGSGKPGS GKPGSQAVVT QEPSLTVSPG GTVTLTCRSS TGAVTTSNYA180
NWWQQKPGQA PRGLIGGTNK RAPGTPARFS GSLLGDKAAL TLGAQPEDE AEYYCALWYS240
NLWVFGGGTK VTVLEPKSSD KHTCPPCPA PEAAGGPSVF LFPPKPKDTL MISRTPEVTC300
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VSVLTVLHQ DWLNGKEYKC360
KVSNAKALAAP IEKTISKAKG QPREPQVYTL PPSRDELTKN QVSLWCLVKG FYPSDIAVEW420
ESNGQPENNY KTTTPVLDSG GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA LHNHYTQKSL480
SLSPGK486

3- Secuencias

45

3- Identificador de la

45 secuencia

45

-1

3- Tipo de molécula

45

DNA

-2

3- Extensión

45

726

-3

3- Características

CDS 1..726

45 Localización/Califica

protein_id = 46

-4- does

1

translation =

EVQLLESGGGLVQPGE
SLRLSCKAFGYFTNHH
INWVRQAPGKCLEWVG
YINPYNDYTTFNDKFK
DRFTLSVDKSKSTAY
LQMNSLRAEDTAVYYC
ARTWGHWFYDLWGQG
TLTVSSGGGGSGGGGS
GGGGSNIQMTQSPSSL
SASVGDRVITCRASQ
SVSSNLAWYQQKPGKA
PKLLIYDSSTRATGVPS
RFSGSGSGTDFTLTIS
SLQPEDFATYYCQQYN
NWPPWTFGCGTKLEI
KR

3- Características

source 1..726

45 Localización/Califica

mol_type = other DNA

-4- does

2

organism = synthetic construct

3- Residuos

45

-5 gaagttcagc tgttgaaag tggtagcgga ctggtccagc ctggcgaatc tctgagactg60

-5

agctgcaagg ccttcgggta taccttacc aaccaccaca tcaattgggt tcgacaagcc120

cctggcaagt gcctggaatg ggtaggatat atcaaccct acaacgacta caccaccttc180

aacgacaagt tcaaggaccg gttcacctg tccgtggata agtccaagag caccgcttac240
ctgcagatga actccctgag agccgaggat acagctgtgt attactgtgc ccggacctgg300
ggccactggg actttgattt gtggggccag ggaaccctcg tgacagtctc ttctggcggc360
ggaggaagcg gaggcggagg ttcaggcggc ggtggatcta acatccagat gacctagtct420
ccatccagcc tgtctgcctc tgtgggcgac agagtgaaa ttacctgtcg ggcctctcag480
tccgtgtcca gcaatctggc ttgtatcag cagaagcccg gcaaggctcc caagctgctg540
atctacgact cctccaccag agctaccggc gtccatcta gattctccgg ctctggctct600
ggcaccgact ttacctgac aatttcagc ctgcagcctg aggacttcgc cacctactac660
tgccagcagt acaacaactg gcctccttg accttcggct gcggcaccaa actggaaatc720
aagcgc726

3- Secuencias

46

3- Identificador de la
46 secuencia
-1

46

3- Tipo de molécula
46
-2

AA

3- Extensión
46
-3

242

3- Características **source 1..242**
46 Localización/Califica **mol_type = protein**
-4- dores
1 **organism = synthetic construct**

3- Residuos
46 EVQLLESGGG LVQPGESLRL SCKAFGYTFT NHHINWVRQA PGKCLEWVG Y INPYNDYTTF60
-5
NDKFKDRFTL SVDKSKSTAY LQMNSLRAED TAVYYCARTW GHWYFDLWGQ GTLTVSSGG120
GGSGGGGSGG GGSNIQMTQS PSSLSASVGD RVTITCRASQ SVSSNLAWYQ QKPGKAPKLL180
IYDSSTRATG VPSRFSGSGS GTDFTLTIS LQPEDFATYY CQQYNNWPPW TFGCGTKLEI240
KR242

3- Secuencias

47

3- Identificador de la
47 secuencia **47**
-1

3- Tipo de molécula
47 **DNA**
-2

3- Extensión
47 **732**
-3

3- Características **CDS 1..732**
47 Localización/Califica
dores **protein_id = 48**

-4-

translation =

1 QVQLQESGPGLVKPSSETLSLTCTVSGGSISGYYSWIRQPPGKCLEWIGYIYYSGFTNYPNPSLKSRVTISVDTSKNQFSLKL
SSVTAADTAVYYCTRDHSHYHYMDVWGQGTTVTVSSGGGGSGGGGSGGGGSSQSVLTQPPSASGTPGQRVTISCSGSSS
NIGSNTVNWYQQFPGTAPKLLIYSNNQRPSGVPDRFSGSKSGTSASLAISGLQSEDEADYYCAGWDDSLNGPVFGCGTK
LTVLG

3- Características

source 1..732

47 Localización/Califica

mol_type = other DNA

-4- does

2

organism = synthetic construct

3- Residuos

47

-5 cagggttcagt tgcaagaatc tggcccaggc ctctgaagc cctccgaaac actgtctctg60
acctgcacag tgtccggcgg ctctatctct ggctactact ggtcctggat cagacagcct120
cctggcaagt gcctggaatg gatcggtac atctactact ctggcttcac caactacaac180
cccagcctga agtcagagc gaccatcagc gtggacacct ctaagaacca gttctctctg240
aagctgtcct ccgtgaccgc cgctgatacc gctgtgtatt actgcaccgc ggaccacagc300
cactactact acatggacgt gtggggacag ggaacaaccg tgacagtctc ttcaggcggg360
ggtggatcag gcggcgagg aagtgggtggc ggaggttctc agtctgtgct gacccaacct420
cctccgctt ctggcacacc tggccagaga gtgacaatct cttgctccgg ctctcctcc480
aacatcggt ctaacaccgt gaactggtat cagcagttcc ccggcaccgc tcctaagctg540
ctgatctact ccaacaacca gcggccttcc ggcgtgccc atagattctc tggctctaag600
tccggcacct ctgccagcct ggctatttct ggactgcaga gcgaggacga ggccgactat660
tattgtgccg gctgggacga ctctctgaac ggccctgtt ttggctgcgg caccaaactg720
actgtgctgg gc732

3- Secuencias

48

3- Identificador de la

48 secuencia **48**

-1

3- Tipo de molécula

48 **AA**

-2

3- Extensión

48 **244**

-3

3- Características **source 1..244**

48 Localización/Califica **mol_type = protein**

-4- dores

1 **organism = synthetic construct**

3- Residuos

48 QVQLQESGPG LVKPSETLSL TCTVSGGSIS GYYWSWIRQP PGKCLEWIGY IYYSGFTNYN60

-5

PSLKSRVTIS VDTSKNQFSL KLSSVTAADT AVYYCTRDHS HYYYMDVWGQ GTTVTVSSGG120

GGSGGGGSGG GGSQSVLTQP PSASGTPGQR VTISCSGSSS NIGSNTVNWY QQFPGTAPKL180

LIYSNNQRPS GVPDRFSGSK SGTSASLAIS GLQSEDEADY YCAGWDDSLN GPVFGCGTKL240

TVLG244

3- Secuencias

49

3- Identificador de la
49 secuencia
-1

49

3- Tipo de molécula
49
-2

DNA

3- Extensión
49
-3

747

3- Características
49 Localización/Califica
-4- dores

CDS 1..747

protein_id = 50

1
translation =
QSVLTQPPSASGTPGQRTVISCSSSNIGSNTVNWYQQFPGTAPKLLIYSNNQRPSGVPDRFSGSKSGTSASLAISGLQ
SEDEADYYCAGWDDSLNGPVFGGGTKLTVLGGGGGSGGGGSGGGGSGGGGSQVQLQESGPGLVKPSETLSLTCTVSG
GSISGYYWSWIRQPPGKGLEWIGYIYYSGFTNYPNPSLKSRTISVDTSKNQFSLKLSSVTAADTAVYYCTRDHSHYYMDV
WGQGTTTVTVSS

3- Características
49 Localización/Califica
-4- dores

source 1..747

mol_type = other DNA

2
organism = synthetic construct

3- Residuos

49
-5 caatctgttc tgaccaacc tcctccgcc tctggcacac ctggccagag agtgaccatc60
tcttgctccg gctcctcctc caacatcggc tctaacaccg tgaactggta tcagcagttc120
cccggcaccg ctctaagct gctgatctac tccaacaacc agcggccttc cggcgtgccc180
gatagattot ctggctctaa gtccggcacc tctgccagcc tggctatttc tggactgcag240

agcgaggacg aggccgacta ttattgtgcc ggctgggacg actctctgaa cggccctgtt300
tttggcgggtg gcaccaaact gacagtgtt ggaggcgggtg gtggatcagg cggcgggtgga360
agtgggtggtg gtggtagcgg aggtgggtgga tctcaggtgc agctccaaga gtctggacct420
ggcctcgtga agccttcga gacactgtct ctgacctgca cagtgtccgg cggctctatc480
tctggctact actggtcctg gatcagacag cctcctggca agggactcga gtggatcggc540
tacatctact actctggctt caccaactac aaccccagcc tgaagtccg cgtgaccatc600
agcgtggaca cctctaagaa ccagttctct ctgaagctgt cctccgtgac cgccgctgat660
accgctgtgt attactgcac ccgggaccac agccactact actacatgga cgtgtgggga720
cagggaacaa ccgtgacagt gtcctcc747

3- Secuencias

50

3- Identificador de la

50 secuencia **50**

-1

3- Tipo de molécula

50 **AA**

-2

3- Extensión

50 **249**

-3

3- Características

source 1..249

50 Localización/Califica

dores

mol_type = protein

-4- **organism = synthetic construct**

1

3- Residuos

50

-5

QSVLTQPPSA SGTPGQRTI SCSGSSSNIG SNTVNWYQQF PGTAPKLLIY SNNQRPSGVP60
DRFSGSKSGT SASLAISGLQ SEDEADYYCA GWDDSLNGPV FGGGTKLTVL GGGGGSGGGG120
SGGGGSGGGG SQVQLQESGP GLVKPSETLS LTCTVSGGSI SGYYWSWIRQ PPGKGLEWIG180
YIYYSGFTNY NPSLKSRVTI SVDTSKNQFS LKLSSVTAAD TAVYYCTRDH SHYYMDVWVG240
QGTTVTVSS249

3- Secuencias

51

3- Identificador de la

51 secuencia

51

-1

3- Tipo de molécula

51

DNA

-2

3- Extensión

51

732

-3

3- Características

CDS 1..732

51 Localización/Califica

protein_id = 52

-4- does

1

translation =

**QVQLQESGPGLVKPSETLSLTCTVSGGSISSYYWSWIRQPPGKCLEWIGYIYYSGYTNYNPSLKSRVNISVDTSQNQFSLK
LNSLTAADTAVYYCARTHSYYYGMDVWVGQGTTVTVSSGGGGSGGGGSGGGGSQSVLTQPPSASGTPGQRTISCSGSS**

**SNIGNNPVNWYQQFPGTAPKLLIYSNNQRPSGVPDRFSGSKSGTSASLAISGLQSEDEADYYCEAWDDSLNGPVFGCG
TKLTVLG**

3- Características **source 1..732**

51 Localización/Califica **mol_type = other DNA**

-4- dores

2 **organism = synthetic construct**

3- Residuos

51
-5 caggttcagt tgcaagaatc tggcccaggc ctcgtgaagc cctccgaaac actgtctctg60
acctgcacag tgtccggcgg ctccatctct tcctactact ggtcctggat cagacagcct120
cctggcaagt gcctggaatg gatcggctac atctactact ccggctacac caactacaac180
cccagcctga agtccagagt gaacatctcc gtggacacca gccagaacca gttctctctg240
aagctgaact ccctgaccgc cgctgatacc gctgtgtatt actgcgctcg gaccacagc300
tactactatg gcatggacgt gtggggacaa gggacaaccg tgacagtctc ttcaggcggc360
ggtggatcag gcggcggagg aagtgggtggc ggaggttctc agtctgtgct gacccaacct420
ccttccgctt ctggcacacc tggccagaga gtgaccatca gctgtagcgg ctctcctcc480
aacatcggca acaaccccgt gaactggtat cagcagttcc ccggcacagc ccctaagctg540
ctgatctact ccaacaacca gcggccttcc ggcgtgcccg atagattctc tggctctaag600
tccggcacct ctgccagcct ggctatttct ggactgcaga gcgaggacga ggccgactac660
tattgcgagg cttgggacga ctctctgaac ggccctgtgt ttggctgtgg caccaaactg720
actgtgctgg gc732

3- Secuencias

52

3- Identificador de la
52 secuencia
-1

52

3- Tipo de molécula
52
-2

AA

3- Extensión
52
-3

244

3- Características
52 Localización/Califica
-4- dores

source 1..244

mol_type = protein

1

organism = synthetic construct

3- Residuos

52
-5 QVQLQESGPG LVKPSETLSL TCTVSGGSIS SYWWSWIRQP PGKCLEWIGY IYSGYTNYN60
PSLKSRVNIS VDTSQNQFSL KLNSLTAADT AVYYCARTHS YYYGMDVWGQ GTTVTVSSGG120
GGSGGGGSGG GGSQSVLTQP PSASGTPGQR VTISCSGSSS NIGNNPVNWY QQFPGTAPKL180
LIYSNNQRPS GVPDRFSGSK SGTSASLAIS GLQSEDEADY YCEAWDDSLN GPVFGCGTKL240
TVLG244

3- Secuencias

53

3- Identificador de la
53 secuencia
-1

53

3- Tipo de molécula

53 **DNA**

-2

3- Extensión

53 **741**

-3

3- Características **CDS 1..741**

53 Localización/Califica **protein_id = 54**

-4- does

1 **translation =**

**QVQLQESGPGLVKPSETLSLTCTVSGGSISSYYWTWIRQPPGKCLELVGYIYYSGYTSYNPSLKSRTISIDTSKNQFSLQLN
SVTAADTAVYFCARDDYGGNGYYGVDVWGQGTTVTVSSGGGGSGGGGSGGGGSQSVLTQPPSASGTPGQRTISCSG
SSSNIGNNPVNWYRQLPGTAPKLLIYSNNQRPSGVPDRFSGSKSGTSASLAISGLQSEDEADYYCAAWDDSLNGWVFG
CGTKLTVLG**

3- Características **source 1..741**

53 Localización/Califica **mol_type = other DNA**

-4- does

2 **organism = synthetic construct**

3- Residuos

53 caggttcagt tgcaagaatc tggcccaggc ctcgtgaagc cctccgaaac actgtctctg60

-5 acctgcacag tgtccggcgg ctccatctct tctactact ggacctggat cagacagcct120

cctggcaagt gcttggaact cgtgggctac atctactact ccggctacac cagctacaac180

cccagcctga agtcagagt gaccatcagc atcgacacct ctaagaacca gttcagcctg240

cagctcaact ccgtgaccgc tgctgatacc gctgtgtact tctgcgccag agatgactac300

ggcggcaacg gctattatgg cgtggacgtt tggggacaag ggacaaccgt gacagtgtct360

agcggagggtg gtggatcagg cggcgggtgga agtggtggtg gtggctctca gtctgtgctg420

acccaacctc cttctgcctc tggcacacct ggccagagag tgacaatctc ttgtccggc480
tcctcctcca acatcggcaa caaccccggtg aactggtaca gacagctgcc aggcacagcc540
cctaagctgc tgatctactc caacaaccag cggccttccg gcgtgcccga tagattctct600
ggatctaagt ccggcaccag cgccagcctg gctatttctg gactgcagag cgaggacgag660
gccgactact actgtgccgc ttgggacgat tctctgaacg gatgggtgtt cggctgcggc720
accaaactga ctgtgctggg a741

3- Secuencias

54

3- Identificador de la

54 secuencia 54

-1

3- Tipo de molécula

54 AA

-2

3- Extensión

54 247

-3

3- Características source 1..247

54 Localización/Califica mol_type = protein

-4- dores

1 organism = synthetic construct

3- Residuos

54

-5 QVQLQESGPG LVKPSETLSL TCTVSGGSIS SYWWTWIRQP PGKCLELVGY IYYSGYTSYN60

PSLKSRVTIS IDTSKNQFSL QLNSVTAADT AVYFCARDDY GGNGYYGVDV WGQGTTVTVS120
SGGGGSGGGG SGGGGSQSVL TQPPSASGTP GQRTISCSG SSSNIGNNPV NWYRQLPGTA180
PKLLIYSNNQ RPSGVPDRFS GSKSGTSASL AISGLQSEDE ADYYCAAWDD SLNGWVFGCG240
TKLTVLG247

3- Secuencias

55

3- Identificador de la
55 secuencia
-1

55

3- Tipo de molécula
55
-2

AA

3- Extensión
55
-3

4

3- Características
55 Localización/Califica
-4- dores
1

source 1..4
mol_type = protein
organism = synthetic construct

3- Residuos
55
-5 GGGS4

3- Secuencias

56

3- Identificador de la

56 secuencia **56**

-1

3- Tipo de molécula

56 **AA**

-2

3- Extensión

56 **4**

-3

3- Características **source 1..4**

56 Localización/Califica **mol_type = protein**

-4- dores

1 **organism = synthetic construct**

3- Residuos

56

-5 SGGG4

3- Secuencias

57

3- Identificador de la

57 secuencia **57**

-1

3- Tipo de molécula

57 **AA**

-2

3- Extensión

57 5

-3

3- Características **source 1..5**

57 Localización/Califica **mol_type = protein**

-4- dores

1 **organism = synthetic construct**

3- Residuos

57

-5 GGGGS5

3- Secuencias

58

3- Identificador de la

58 secuencia **58**

-1

3- Tipo de molécula

58 **AA**

-2

3- Extensión

58 5

-3

3- Características **source 1..5**

58 Localización/Califica **mol_type = protein**

-4- dores

1 **organism = synthetic construct**

3- Residuos
58
-5 SGGGG5

3- Secuencias
59

3- Identificador de la
59 secuencia **59**
-1

3- Tipo de molécula
59 **AA**
-2

3- Extensión
59 **6**
-3

3- Características **source 1..6**
59 Localización/Califica
-4- dores **mol_type = protein**
1 **organism = synthetic construct**

3- Residuos
59
-5 GGGGGS6

3- Secuencias
60

3- Identificador de la
60 secuencia
-1

60

3- Tipo de molécula
60
-2

AA

3- Extensión
60
-3

6

3- Características
60 Localización/Califica
-4- dores

source 1..6

mol_type = protein

1

organism = synthetic construct

3- Residuos
60
-5 SGGGGG6

3- Secuencias

61

3- Identificador de la
61 secuencia
-1

61

3- Tipo de molécula
61
-2

AA

3- Extensión

61 7

-3

3- Características **source 1..7**

61 Localización/Califica **mol_type = protein**

-4- dores

1 **organism = synthetic construct**

3- Residuos

61

-5 GGGGGGS7

3- Secuencias

62

3- Identificador de la

62 secuencia **62**

-1

3- Tipo de molécula

62 **AA**

-2

3- Extensión

62 7

-3

3- Características **source 1..7**

62 Localización/Califica **mol_type = protein**

-4- dores

1 **organism = synthetic construct**

3- Residuos
62
-5 SGGGGGG7

3- Secuencias
63

3- Identificador de la
63 secuencia **63**
-1

3- Tipo de molécula
63 **AA**
-2

3- Extensión
63 **5**
-3

3- Características **source 1..5**
63 Localización/Califica
-4- dores **mol_type = protein**
1 **organism = synthetic construct**

3- Residuos
63
-5 GKPGS5

3- Secuencias
64

3- Identificador de la
64 secuencia
-1

64

3- Tipo de molécula
64
-2

DNA

3- Extensión
64
-3

1365

3- Características
64 Localización/Califica
-4- dores

source 1..1365

mol_type = other DNA

1

organism = synthetic construct

3- Características
64 Localización/Califica
-4- dores

CDS 1..1365

protein_id = 65

2

translation =

**QVHLVQSGAEVKKPGASVKISCKASGYILTSYYMQWVRQAPGQGLEWMGIINPSYGGTRYAQKFQGRVTMTRDTSTSTV
YMEISSLRSEDTAVYYCARDHLLGPRDYIYGLDVWGQGTTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFP
EPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPA
PEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQ
DWLNGKEYKCKVSNKALAAPIEKISKAKGQPREPQVYTLPPSRDELTKNQVSLSCAVKGFYPSDIAVEWESNGQPENNY
KTPPVLDSDGSFFLVSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK**

3- Residuos

64
-5 caagtgcattc tgggtcagtc tggcgccgaa gtgaagaaac ctggcgctc cgtgaagatc60

tcctgcaagg cctctggcta catcctgacc agctactaca tgcagtgggt cgcacaggct120

cctggacagg gacttgagt gatgggcatc atcaaccca gctacggcgg caccagatac180

gcccagaaat tccagggcag agtgaccatg accagagaca cctccaccag caccgtgtac240
atggaactgt ccagcctgag atccgaggac accgccgtgt actactgcgc cagagatcat300
ctgctgggcc ccagagatta ctactactac ggcctggatg tgtggggcca gggcacaaca360
gtgacagtgt cctcgcctt caccaaggga ccctctgtgt ttctctggc tccctccagc420
aagtctacct ctggtggaac agctgccctg ggctgcctgg tcaaggatta ctttctgag480
cctgtgaccg tgcctggaa ctctggcgct ctgacatctg gcgtgcacac cttccagct540
gtgctgcagt cctccggcct gtactctctg tcctctgtcg tgaccgtgcc ttccagctct600
ctgggcaccc agacctacat ctgcaatgtg aaccacaagc cttccaacac caaggtggac660
aagaaggtgg aaccaagtc ctgcgacaag acccacacct gtctccatg tcctgctcca720
gaagctgctg gcggcccatc cgtgtttctg ttccctcaa agcctaagga caccctgatg780
atcagcagaa cccctgaagt gacctgcgtg gtggtggatg tgtccacga ggaccagaa840
gtgaagttca attggtacgt ggacggcgtg gaagtgcaca acgccaagac caagcctaga900
gaggaacagt acaactccac ctacagagtg gtgtccgtgc tgaccgtgct gcaccaggat960
tggctgaacg gcaaagagta caagtgaag gtgtccaaca aggccctggc cgctcctatc1020
gaaaagacca tctccaaggc caagggccag ctaggggaac cccaggttta caccttgcct1080
ccatctcggg acgagctgac caagaaccag gtgtccctgt cttgtgccgt gaagggttc1140
taccctccg atatcgctgt ggaatgggag agcaatggcc agccagagaa caactacaag1200
acaaccctc ctgtgctgga ctccgacggc tcattcttcc tgggtgcaa gctgacagt1260
gacaagtcca gatggcagca gggcaacgtg ttctcctgca gcgtgatgca cgaggccctg1320
cacaatcact acacacagaa gtctctgtct ctgagccccg gcaaa1365

3- Secuencias

65

3- Identificador de la

65 secuencia **65**

-1

3- Tipo de molécula

65 **AA**

-2

3- Extensión

65 **455**

-3

3- Características **source 1..455**

65 Localización/Califica **mol_type = protein**

-4- dores

1 **organism = synthetic construct**

3- Residuos

65 QVHLVQSGAE VKKPGASVKI SCKASGYILT SYMQWVRQA PGQGLEWMGI INPSYGGTRY60
-5 AQKFQGRVTM TRDTSTSTVY MELSSLRSED TAVYYCARDH LLGPRDYFFF GLDVWGQGTT120
VTVSSASTKG PSVFPLAPSS KSTSGGTAAL GCLVKDYFPE PVTVSWNSGA LTSGVHTFPA180
VLQSSGLYSL SSVVTVPSST LGTQTYICNV NHKPSNTKVD KKVEPKSCDK THTCPPCPAP240
EAAGGPSVFL FPPKPKDTLM ISRTPEVTCV VVDVSHEDPE VKFNWYVDGV EVHNAKTKPR300
EEQYNSTYRV VSVLTVLHQD WLNGKEYKCK VSNKALAAPI EKTISKAKGQ PREPQVYTLTP360
PSRDELTKNQ VSLSCAVKGF YPSDIAVEWE SNGQPENNYK TTPPVLDSDG SFFLVSKLTV420
DKSRWQQGNV FSCSVMHEAL HNHYTQKSLS LSPGK455

3- Secuencias

66

3- Identificador de la

66 secuencia **66**

-1

3- Tipo de molécula

66 **DNA**

-2

3- Extensión

66 **648**

-3

3- Características **source 1..648**

66 Localización/Califica **mol_type = other DNA**

-4- dores

1 **organism = synthetic construct**

3- Características **CDS 1..648**

66 Localización/Califica **protein_id = 67**

-4- dores

2 **translation =**

**QSVLTQPPSVSAAPGQKVTISCSGSSSNIGNNYVSWYQQFPGTAPKLLIYDNNKRPSGIPDRFSGSKSGTSATLGITGLQT
GDEADYYCGTWDSSLRAHVFGTGKVTVLGQPKANPTVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKADGSPVKA
GVETTKPSKQSNNKYAASSYLSLTPEQWKSHRSYSCQVTHEGSTVEKTVAPTECS**

3- Residuos

66 cagtccgtgc tgaccagcc tccttctgtt tctgctgccc ctggccagaa agtgaccatc60

-5

tcttgctccg gctcctcctc caacatoggc aacaactacg tgtcctggta tcagcagttc120

cccggcaccg ctctaagct gctgatctac gacaacaaca agcggcccag cggcatccct180
gacagattct ccggatctaa gtccggcacc tctgctaccc tgggcatcac aggattgcag240
acaggcgacg aggccgacta ctattgcggc acctgggaca gttctctgcg ggcccatgtt300
tttggcaccg gcaccaaagt gaccgtgctg ggacagccta aggccaatcc taccgtgaca360
ctgttcctc catcctccga ggaactgcag gccacaagg ctaccctcgt gtgcctgac420
tccgactttt accctggcgc tgtgaccgtg gcctggaagg ctgatggatc tcctgtgaag480
gctggcgtgg aaaccaccaa gcctccaag cagtccaaca acaaatacgc cgctcctcc540
tacctgtctc tgaccctga acagtgaag tcccaccggt cctactctg ccaagtgacc600
catgagggt ccaccgtgga aaagaccgtg gctcctaccg agtgctct648

3- Secuencias

67

3- Identificador de la

67 secuencia **67**

-1

3- Tipo de molécula

67 **AA**

-2

3- Extensión

67 **216**

-3

3- Características **source 1..216**

67 Localización/Califica
dores **mol_type = protein**

-4-

organism = synthetic construct

1

3- Residuos

67

-5

QSVLTQPPSV SAAPGQKVTI SCSSGSSSNIG NNYVSWYQQF PGTAPKLLIY DNNKRPSGIP60

DRFSGSKSGT SATLGITGLQ TGDEADYYCG TWDSSLRAHV FGTGTKVTVL GQPKANPTVT120

LFPPSSEELQ ANKATLVCLI SDFYPGAVTV AWKADGSPVK AGVETTKPSK QSNNKYAASS180

YLSLTPEQWK SHRSYSCQVT HEGSTVEKTV APTECS216
