

852497.TXT  
LISTADO DE SECUENCIAS

<110> Takeda Gmbh  
<120> Formulaci3n l3quida que comprende un compuesto neutralizante de GM-CSF  
<130> 1749  
  
<160> 60  
<170> PatentIn version 3.5

<210> 1  
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<220>  
<223> CDR-H3 7A-701

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Ser Gly Leu Ile Ala Asn His Met Thr Pro  
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Thr Thr Leu Ile Ser Val Tyr Phe Asp Tyr  
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Ser Gly Leu Ile Phe Asp Tyr Trp Leu Asp  
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Ser Gly Leu Ile Ile Asp Ala Leu Ser Pro

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Thr Ser Leu Met Ser Ile Tyr Phe Asp Tyr  
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Ser Gly Leu Leu Phe Leu Tyr Phe Asp Tyr  
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Ser Gly Leu Ile Asn Leu Gly Met His Pro  
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Ser Gly Leu Ile Phe Asp Ala Leu Arg Asp  
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Ser Gly Leu Ile Phe Asp Lys Leu Thr Ser  
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Ser Gly Leu Ile Asn Leu His Phe Asp Thr  
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Ser Thr His Phe Ser Ala Tyr Phe Asp Tyr  
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Ser Gly Leu Ile Met Asp Lys Leu Asp Asn  
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Ser Gly Leu Ile Ile Asp Asn Leu Asn Pro  
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&lt;400&gt; 14

Asp Tyr Leu Leu His  
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&lt;212&gt; PRT

&lt;213&gt; secuencia artificial

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&lt;223&gt; CDR-H2 7B1-502

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Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe Gln  
 1 5 10 15  
 Gly

&lt;210&gt; 16

&lt;211&gt; 11

&lt;212&gt; PRT

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&lt;223&gt; CDR-L1 5-306

&lt;400&gt; 16

Arg Ala Ser Gln Asn Ile Arg Asn Ile Leu Asn  
 1 5 10

&lt;210&gt; 17

&lt;211&gt; 7

&lt;212&gt; PRT

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&lt;223&gt; CDR-L2 5-306

&lt;400&gt; 17

Ala Ala Ser Asn Leu Gln Ser  
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&lt;210&gt; 18

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; secuencia artificial

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&lt;223&gt; CDR-L3 5-306

&lt;400&gt; 18

Gln Gln Ser Tyr Ser Met Pro Arg Thr  
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&lt;210&gt; 19

&lt;211&gt; 107

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<223> VL 5-306\* L-version

<400> 19

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1      5      10      15
Asp Arg Val Thr Ile Ala Cys Arg Ala Ser Gln Asn Ile Arg Asn Ile
20     25     30
Leu Asn Trp Tyr Gln Gln Arg Pro Gly Lys Ala Pro Gln Leu Leu Ile
35     40     45
Tyr Ala Ala Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50     55     60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Gln Pro
65     70     75     80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Met Pro Arg
85     90     95
Thr Phe Gly Gly Thr Lys Leu Glu Ile Lys
100    105

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<223> VH con CDR-H3 = 7A-701

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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
20     25     30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35     40     45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
50     55     60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65     70     75     80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85     90     95
Thr Arg Ser Gly Leu Ile Ala Asn His Met Thr Pro Trp Gly Gln Gly
100    105    110
Thr Met Val Thr Val Ser Ser
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<210> 21

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<223> VH con CDR-H3 = 7B1-502\*

<400> 21

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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
20     25     30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35     40     45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe

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50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Thr Arg Thr Thr Leu Ile Ser Val Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser  
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<210> 22  
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 <223> VH con CDR-H3 = 3077\*

<400> 22

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 25 30  
 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  
 35 40 45  
 Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Thr Arg Ser Gly Leu Ile Ala Val Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser  
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 <223> VH con CDR-H3 = L38-A1

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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 25 30  
 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  
 35 40 45  
 Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Ser Gly Leu Ile Phe Asp Tyr Trp Leu Asp Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser  
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 <223> VH con CDR-H3 = L38-A12

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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Ser Gly Leu Ile Ile Asp Ala Leu Ser Pro Trp Gly Gln Gly
      100      105      110
Thr Met Val Thr Val Ser Ser
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<220>  
 <223> VH con CDR-H3 = L38-G7

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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Thr Arg Thr Ser Leu Met Ser Ile Tyr Phe Asp Tyr Trp Gly Gln Gly
      100      105      110
Thr Met Val Thr Val Ser Ser
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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr

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      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
      65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Thr Arg Ser Gly Leu Leu Phe Leu Tyr Phe Asp Tyr Trp Gly Gln Gly
      100      105      110
Thr Met Val Thr Val Ser Ser
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<210> 27  
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 <223> VH con CDR-H3 = E1-37-E7

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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
      65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Ser Gly Leu Ile Asn Leu Gly Met His Pro Trp Gly Gln Gly
      100      105      110
Thr Met Val Thr Val Ser Ser
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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
      65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Ser Gly Leu Ile Phe Asp Ala Leu Arg Asp Trp Gly Gln Gly
      100      105      110
Thr Met Val Thr Val Ser Ser

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115

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 <223> VH con CDR-H3 = Ln4p-23

<400> 29

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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Ser Gly Leu Ile Phe Asp Lys Leu Thr Ser Trp Gly Gln Gly
      100      105      110
Thr Met Val Thr Val Ser Ser
      115

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<210> 30  
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 <223> VH con CDR-H3 = Ln4p-28

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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Ser Gly Leu Ile Asn Leu His Phe Asp Thr Trp Gly Gln Gly
      100      105      110
Thr Met Val Thr Val Ser Ser
      115

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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Thr Arg Ser Thr His Phe Ser Ala Tyr Phe Asp Tyr Trp Gly Gln Gly
      100      105      110
Thr Met Val Thr Val Ser Ser
      115

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<220>
<223> VH con CDR-H3 = Ln4p-65

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<400> 32

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Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Ser Gly Leu Ile Met Asp Lys Leu Asp Asn Trp Gly Gln Gly
      100      105      110
Thr Met Val Thr Val Ser Ser
      115

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<210> 33
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<223> VH con CDR-H3 = Ln4p-90

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<400> 33

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```

Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95

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Ala Arg Ser Gly 85  
 100 Leu Ile Ile Asp Asn 90  
 105 Leu Asn Pro Trp Gly 95  
 110 Gln Gly  
 Thr Met Val Thr Val Ser Ser  
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<210> 34  
 <211> 214  
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<220>  
 <223> Cadena Liviana 5-306\* L-version

<400> 34

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Ala Cys Arg Ala Ser Gln Asn Ile Arg Asn Ile  
 20 25 30  
 Leu Asn Trp Tyr Gln Gln Arg Pro Gly Lys Ala Pro Gln Leu Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Met Pro Arg  
 85 90 95  
 Thr Phe Gly Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala  
 100 105 110  
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly  
 115 120 125  
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala  
 130 135 140  
 Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln  
 145 150 155 160  
 Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser  
 165 170 175  
 Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr  
 180 185 190  
 Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser  
 195 200 205  
 Phe Asn Arg Gly Glu Cys  
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 <223> Cadena pesada con CDR-H3 = 7B1-502\*

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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 25 30  
 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  
 35 40 45  
 Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |     |  |  |
| Thr | Arg | Thr | Thr | Leu | Ile | Ser | Val | Tyr | Phe | Asp | Tyr | Trp | Gly | Gln | Gly |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Thr | Met | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Pro | Leu | Ala | Pro | Ser | Ser | Lys | Ser | Thr | Ser | Gly | Gly | Thr | Ala | Ala | Leu |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu |  |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Gln | Ser | Ser | Gly | Leu | Tyr | Ser | Leu | Ser | Ser | Val | Val | Thr | Val | Pro | Ser |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Ser | Ser | Leu | Gly | Thr | Gln | Thr | Tyr | Ile | Cys | Asn | Val | Asn | His | Lys | Pro |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Ser | Asn | Thr | Lys | Val | Asp | Lys | Lys | Val | Glu | Pro | Lys | Ser | Cys | Asp | Lys |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Thr | His | Thr | Cys | Pro | Pro | Cys | Pro | Ala | Pro | Glu | Leu | Leu | Gly | Gly | Pro |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |  |
| Ser | Val | Phe | Leu | Phe | Pro | Pro | Lys | Pro | Lys | Asp | Thr | Leu | Met | Ile | Ser |  |  |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |  |
| Arg | Thr | Pro | Glu | Val | Thr | Cys | Val | Val | Val | Asp | Val | Ser | His | Glu | Asp |  |  |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     |     | 270 |     |  |  |
| Pro | Glu | Val | Lys | Phe | Asn | Trp | Tyr | Val | Asp | Gly | Val | Glu | Val | His | Asn |  |  |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |  |
| Ala | Lys | Thr | Lys | Pro | Arg | Glu | Gln | Tyr | Asn | Ser | Thr | Tyr | Arg | Val |     |  |  |
|     | 290 |     |     |     |     | 295 |     |     |     | 300 |     |     |     |     |     |  |  |
| Val | Ser | Val | Leu | Thr | Val | Leu | His | Gln | Asp | Trp | Leu | Asn | Gly | Lys | Glu |  |  |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     | 320 |     |  |  |
| Tyr | Lys | Cys | Lys | Val | Ser | Asn | Lys | Ala | Leu | Pro | Ala | Pro | Ile | Glu | Lys |  |  |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |  |  |
| Thr | Ile | Ser | Lys | Ala | Lys | Gly | Gln | Pro | Arg | Glu | Pro | Gln | Val | Tyr | Thr |  |  |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |  |  |
| Leu | Pro | Pro | Ser | Arg | Asp | Glu | Leu | Thr | Lys | Asn | Gln | Val | Ser | Leu | Thr |  |  |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |  |  |
| Cys | Leu | Val | Lys | Gly | Phe | Tyr | Pro | Ser | Asp | Ile | Ala | Val | Glu | Trp | Glu |  |  |
|     | 370 |     |     |     |     | 375 |     |     |     | 380 |     |     |     |     |     |  |  |
| Ser | Asn | Gly | Gln | Pro | Glu | Asn | Asn | Tyr | Lys | Thr | Thr | Pro | Pro | Val | Leu |  |  |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |  |  |
| Asp | Ser | Asp | Gly | Ser | Phe | Phe | Leu | Tyr | Ser | Lys | Leu | Thr | Val | Asp | Lys |  |  |
|     |     |     | 405 |     |     |     |     |     | 410 |     |     |     |     | 415 |     |  |  |
| Ser | Arg | Trp | Gln | Gln | Gly | Asn | Val | Phe | Ser | Cys | Ser | Val | Met | His | Glu |  |  |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |  |  |
| Ala | Leu | His | Asn | His | Tyr | Thr | Gln | Lys | Ser | Leu | Ser | Leu | Ser | Pro | Gly |  |  |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |  |  |

<210> 36  
 <211> 449  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> Cadena pesada con CDR-H3 =7A-701\*

<400> 36

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Gln | Val | Gln | Leu | Val | Gln | Ser | Gly | Ala | Glu | Val | Lys | Lys | Pro | Gly | Ala |  |  |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |  |  |
| Ser | Val | Lys | Val | Ser | Cys | Lys | Ala | Phe | Gly | Tyr | Pro | Phe | Thr | Asp | Tyr |  |  |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |  |  |
| Leu | Leu | His | Trp | Val | Arg | Gln | Ala | Pro | Gly | Gln | Gly | Leu | Glu | Trp | Val |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Gly | Trp | Leu | Asn | Pro | Tyr | Ser | Gly | Asp | Thr | Asn | Tyr | Ala | Gln | Lys | Phe |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |  |  |
| Gln | Gly | Arg | Val | Thr | Met | Thr | Arg | Asp | Thr | Ser | Ile | Ser | Thr | Ala | Tyr |  |  |

## 852497.TXT

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65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Thr Arg Ser Gly Leu Ile Ala Asn His Met Thr Pro Trp Gly Gln Gly
      100      105      110
Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
      115      120      125
Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu
      130      135      140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
      145      150      155      160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
      165      170      175
Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
      180      185      190
Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro
      195      200      205
Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys
      210      215      220
Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro
      225      230      235      240
Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
      245      250      255
Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
      260      265      270
Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
      275      280      285
Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val
      290      295      300
Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
      305      310      315      320
Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
      325      330      335
Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
      340      345      350
Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr
      355      360      365
Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
      370      375      380
Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu
      385      390      395      400
Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys
      405      410      415
Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
      420      425      430
Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
      435      440      445
Lys

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<210> 37
<211> 449
<212> PRT
<213> secuencia artificial

```

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<220>
<223> Cadena pesada con CDR-H3 = L38-A1*

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<400> 37

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```

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr
      20      25      30
Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
      35      40      45
Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe

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## 852497.TXT

50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Ser Gly Leu Ile Phe Asp Tyr Trp Leu Asp Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu  
 130 135 140  
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 150 155 160  
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 170 175  
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
 180 185 190  
 Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro  
 195 200 205  
 Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys  
 210 215 220  
 Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
 225 230 235 240  
 Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
 245 250 255  
 Arg Thr Pro Glu Val Thr Cys Val Val Asp Val Ser His Glu Asp  
 260 265 270  
 Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn  
 275 280 285  
 Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
 290 295 300  
 Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
 305 310 315 320  
 Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
 325 330 335  
 Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
 340 345 350  
 Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr  
 355 360 365  
 Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu  
 370 375 380  
 Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
 385 390 395 400  
 Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
 405 410 415  
 Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu  
 420 425 430  
 Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly  
 435 440 445  
 Lys

<210> 38  
 <211> 449  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> Cadena pesada con CDR-H3 = L38-A12\*

<400> 38

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 25 30  
 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val

## 852497.TXT

Gly Trp 35 Asn Pro Tyr Ser 40 Gly Asp Thr Asn Tyr 45 Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Ser Gly Leu Ile Ile Asp Ala Leu Ser Pro Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu  
 130 135 140  
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 150 155 160  
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 170 175  
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
 180 185 190  
 Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro  
 195 200 205  
 Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys  
 210 215 220  
 Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
 225 230 235 240  
 Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
 245 250 255  
 Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp  
 260 265 270  
 Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn  
 275 280 285  
 Ala Lys Thr Lys Pro Arg Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
 290 295 300  
 Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
 305 310 315 320  
 Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
 325 330 335  
 Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
 340 345 350  
 Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr  
 355 360 365  
 Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu  
 370 375 380  
 Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
 385 390 395 400  
 Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
 405 410 415  
 Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu  
 420 425 430  
 Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly  
 435 440 445  
 Lys

<210> 39  
 <211> 449  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> Cadena pesada con CDR-H3 = L38-G7\*

<400> 39

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr

## 852497.TXT

Leu Leu His 20 Trp Val Arg Gln Ala 25 Gly Gln Gly 30 Leu Glu Trp Val  
 Gly Trp 35 Leu Asn Pro Tyr Ser 40 Gly Asp Thr Asn Tyr 45 Ala Gln Lys Phe  
 Gln Gly 50 Arg Val Thr Met 55 Thr Arg Asp Thr Ser 60 Ile Ser Thr Ala Tyr  
 65 Met Glu Leu Ser Arg 85 Leu Arg Ser Asp 90 Thr Ala Val Tyr Tyr Cys  
 Thr Arg Thr Ser 100 Leu Met Ser Ile Tyr 105 Phe Asp Tyr Trp Gly Gln Gly  
 Thr Met Val Thr Val Ser Ser Ala 120 Ser Thr Lys Gly Pro Ser Val Phe  
 Pro Leu 115 Ala Pro Ser Ser Lys 135 Ser Thr Ser Gly Gly Thr Ala Ala Leu  
 Gly Cys 130 Leu Val Lys Asp 150 Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 Asn Ser Gly Ala Leu 165 Thr Ser Gly Val His 170 Thr Phe Pro Ala Val Leu  
 Gln Ser Ser Gly 180 Leu Tyr Ser Leu Ser 185 Ser Val Val Thr Val Pro Ser  
 Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro  
 195 Ser Asn Thr Lys Val Asp Lys 215 Lys Val Glu Pro Lys Ser Cys Asp Lys  
 Thr 225 His Thr Cys Pro Pro 230 Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
 Ser Val Phe Leu Phe 245 Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
 Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp  
 260 Pro Glu Val Lys Phe Asn Trp Tyr 280 Val Asp Gly Val Glu Val His Asn  
 Ala Lys Thr Lys Pro Arg Glu 295 Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
 305 Val Ser Val Leu Thr Val 310 Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
 Tyr Lys Cys Lys Val 325 Ser Asn Lys Ala Leu 330 Pro Ala Pro Ile Glu Lys  
 Thr Ile Ser Lys Ala Lys Gly Gln Pro 345 Arg Glu Pro Gln Val Tyr Thr  
 Leu Pro Pro Ser Arg Asp Glu Leu 360 Thr Lys Asn Gln Val Ser Leu Thr  
 Cys Leu Val Lys Gly Phe Tyr 375 Pro Ser Asp Ile Ala Val Glu Trp Glu  
 Ser Asn Gly Gln Pro Glu 390 Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
 385 Asp Ser Asp Gly Ser 405 Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
 Ser Arg Trp Gln Gln Gly Asn Val Phe 425 Ser Cys Ser Val Met His Glu  
 Ala Leu His Asn His Tyr Thr Gln 440 Lys Ser Leu Ser Leu Ser Pro Gly  
 435 Lys

&lt;210&gt; 40

&lt;211&gt; 449

&lt;212&gt; PRT

&lt;213&gt; secuencia artificial

&lt;220&gt;

&lt;223&gt; Cadena pesada con CDR-H3 = L39-D11\*

&lt;400&gt; 40

Gln val Gln Leu val Gln Ser Gly Ala Glu val Lys Lys Pro Gly Ala

## 852497.TXT

|   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |     |     |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|
| 1 | Ser | Val | Lys | Val | 5   | Ser | Cys | Lys | Ala | Phe | 10  | Gly | Tyr | Pro | Phe | Thr | 15 | Asp | Tyr |
|   |     |     |     | 20  |     |     |     |     |     | 25  |     |     |     |     |     | 30  |    |     |     |
|   | Leu | Leu | His | Trp | Val | Arg | Gln | Ala | Pro | Gly | Gln | Gly | Leu | Glu | Trp | Val |    |     |     |
|   |     |     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |     |    |     |     |
|   | Gly | Trp | Leu | Asn | Pro | Tyr | Ser | Gly | Asp | Thr | Asn | Tyr | Ala | Gln | Lys | Phe |    |     |     |
|   |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |    |     |     |
|   | Gln | Gly | Arg | Val | Thr | Met | Thr | Arg | Asp | Thr | Ser | Ile | Ser | Thr | Ala | Tyr |    |     |     |
|   |     |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |    |     |     |
|   | Met | Glu | Leu | Ser | Arg | Leu | Arg | Ser | Asp | Asp | Thr | Ala | Val | Tyr | Tyr | Cys |    |     |     |
|   |     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |    |     |     |
|   | Thr | Arg | Ser | Gly | Leu | Leu | Phe | Leu | Tyr | Phe | Asp | Tyr | Trp | Gly | Gln | Gly |    |     |     |
|   |     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |    |     |     |
|   | Thr | Met | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe |    |     |     |
|   |     |     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |    |     |     |
|   | Pro | Leu | Ala | Pro | Ser | Ser | Lys | Ser | Thr | Ser | Gly | Gly | Thr | Ala | Ala | Leu |    |     |     |
|   |     |     |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |    |     |     |
|   | Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp |    |     |     |
|   |     |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |    |     |     |
|   | Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu |    |     |     |
|   |     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |    |     |     |
|   | Gln | Ser | Ser | Gly | Leu | Tyr | Ser | Leu | Ser | Ser | Val | Val | Thr | Val | Pro | Ser |    |     |     |
|   |     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |    |     |     |
|   | Ser | Ser | Leu | Gly | Thr | Gln | Thr | Tyr | Ile | Cys | Asn | Val | Asn | His | Lys | Pro |    |     |     |
|   |     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |    |     |     |
|   | Ser | Asn | Thr | Lys | Val | Asp | Lys | Lys | Val | Glu | Pro | Lys | Ser | Cys | Asp | Lys |    |     |     |
|   |     |     |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |    |     |     |
|   | Thr | His | Thr | Cys | Pro | Pro | Cys | Pro | Ala | Pro | Glu | Leu | Leu | Gly | Gly | Pro |    |     |     |
|   |     |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     |     | 240 |    |     |     |
|   | Ser | Val | Phe | Leu | Phe | Pro | Pro | Lys | Pro | Lys | Asp | Thr | Leu | Met | Ile | Ser |    |     |     |
|   |     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |    |     |     |
|   | Arg | Thr | Pro | Glu | Val | Thr | Cys | Val | Val | Val | Asp | Val | Ser | His | Glu | Asp |    |     |     |
|   |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     |     | 270 |     |    |     |     |
|   | Pro | Glu | Val | Lys | Phe | Asn | Trp | Tyr | Val | Asp | Gly | Val | Glu | Val | His | Asn |    |     |     |
|   |     |     |     | 275 |     |     |     | 280 |     |     |     |     | 285 |     |     |     |    |     |     |
|   | Ala | Lys | Thr | Lys | Pro | Arg | Glu | Glu | Gln | Tyr | Asn | Ser | Thr | Tyr | Arg | Val |    |     |     |
|   |     |     |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |    |     |     |
|   | Val | Ser | Val | Leu | Thr | Val | Leu | His | Gln | Asp | Trp | Leu | Asn | Gly | Lys | Glu |    |     |     |
|   |     |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |    |     |     |
|   | Tyr | Lys | Cys | Lys | Val | Ser | Asn | Lys | Ala | Leu | Pro | Ala | Pro | Ile | Glu | Lys |    |     |     |
|   |     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |    |     |     |
|   | Thr | Ile | Ser | Lys | Ala | Lys | Gly | Gln | Pro | Arg | Glu | Pro | Gln | Val | Tyr | Thr |    |     |     |
|   |     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |    |     |     |
|   | Leu | Pro | Pro | Ser | Arg | Asp | Glu | Leu | Thr | Lys | Asn | Gln | Val | Ser | Leu | Thr |    |     |     |
|   |     |     |     | 355 |     |     |     | 360 |     |     |     |     | 365 |     |     |     |    |     |     |
|   | Cys | Leu | Val | Lys | Gly | Phe | Tyr | Pro | Ser | Asp | Ile | Ala | Val | Glu | Trp | Glu |    |     |     |
|   |     |     |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |    |     |     |
|   | Ser | Asn | Gly | Gln | Pro | Glu | Asn | Asn | Tyr | Lys | Thr | Pro | Pro | Val | Leu |     |    |     |     |
|   |     |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     | 400 |     |    |     |     |
|   | Asp | Ser | Asp | Gly | Ser | Phe | Phe | Leu | Tyr | Ser | Lys | Leu | Thr | Val | Asp | Lys |    |     |     |
|   |     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |    |     |     |
|   | Ser | Arg | Trp | Gln | Gln | Gly | Asn | Val | Phe | Ser | Cys | Ser | Val | Met | His | Glu |    |     |     |
|   |     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |    |     |     |
|   | Ala | Leu | His | Asn | His | Tyr | Thr | Gln | Lys | Ser | Leu | Ser | Leu | Ser | Pro | Gly |    |     |     |
|   |     |     |     | 435 |     |     |     | 440 |     |     |     |     | 445 |     |     |     |    |     |     |
|   | Lys |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |     |     |

<210> 41  
 <211> 449  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> Cadena pesada con CDR-H3 = E1-37-E7\*

<400> 41

## 852497.TXT

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  
 35 Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe  
 50 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 Ala Arg Ser Gly Leu Ile Asn Leu Gly Met His Pro Trp Gly Gln Gly  
 100 Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu  
 130 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
 180 Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro  
 195 Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys  
 210 Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
 225 Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
 245 Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp  
 260 Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn  
 275 Ala Lys Thr Lys Pro Arg Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
 290 Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
 305 Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
 325 Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
 340 Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr  
 355 Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu  
 370 Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
 385 Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
 405 Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu  
 420 Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly  
 435 Lys

&lt;210&gt; 42

&lt;211&gt; 449

&lt;212&gt; PRT

&lt;213&gt; secuencia artificial

&lt;220&gt;

&lt;223&gt; Cadena pesada con CDR-H3 = M1\_3-82\*

&lt;400&gt; 42

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  
 35 Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe  
 50 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 Ala Arg Ser Gly Leu Ile Phe Asp Ala Leu Arg Asp Trp Gly Gln Gly  
 100 Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu  
 130 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Val Val Thr Val Pro Ser  
 180 ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro  
 195 Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys  
 210 Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
 225 Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
 245 Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp  
 260 Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn  
 275 Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
 290 Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
 305 Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
 325 Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
 340 Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr  
 355 Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu  
 370 Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
 385 Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
 405 Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu  
 420 Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly  
 435 Lys

&lt;210&gt; 43

&lt;211&gt; 449

&lt;212&gt; PRT

&lt;213&gt; secuencia artificial

&lt;220&gt;

&lt;223&gt; Cadena pesada con CDR-H3 = Ln4p-23\*

&lt;400&gt; 43

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 25 30  
 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  
 35 40 45  
 Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Ser Gly Leu Ile Phe Asp Lys Leu Thr Ser Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu  
 130 135 140  
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 150 155 160  
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 170 175  
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
 180 185 190  
 Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro  
 195 200 205  
 Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys  
 210 215 220  
 Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
 225 230 235 240  
 Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
 245 250 255  
 Arg Thr Pro Glu Val Thr Cys Val Val Asp Val Ser His Glu Asp  
 260 265 270  
 Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn  
 275 280 285  
 Ala Lys Thr Lys Pro Arg Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
 290 295 300  
 Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
 305 310 315 320  
 Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
 325 330 335  
 Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
 340 345 350  
 Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr  
 355 360 365  
 Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu  
 370 375 380  
 Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
 385 390 395 400  
 Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
 405 410 415  
 Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu  
 420 425 430  
 Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly  
 435 440 445  
 Lys

&lt;210&gt; 44

&lt;211&gt; 449

&lt;212&gt; PRT

&lt;213&gt; secuencia artificial

&lt;220&gt;

&lt;223&gt; Cadena pesada con CDR-H3 = Ln4p-28\*

&lt;400&gt; 44

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 25 30  
 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  
 35 40 45  
 Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Ser Gly Leu Ile Asn Leu His Phe Asp Thr Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu  
 130 135 140  
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 150 155 160  
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 170 175  
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Val Val Thr Val Pro Ser  
 180 185 190  
 Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro  
 195 200 205  
 Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys  
 210 215 220  
 Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
 225 230 235 240  
 Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
 245 250 255  
 Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp  
 260 265 270  
 Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn  
 275 280 285  
 Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
 290 295 300  
 Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
 305 310 315 320  
 Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
 325 330 335  
 Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
 340 345 350  
 Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr  
 355 360 365  
 Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu  
 370 375 380  
 Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
 385 390 395 400  
 Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
 405 410 415  
 Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu  
 420 425 430  
 Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly  
 435 440 445  
 Lys

&lt;210&gt; 45

<211> 449  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> Cadena pesada con CDR-H3 = Ln4p-50\*

<400> 45

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Gln | Leu | Val | Gln | Ser | Gly | Ala | Glu | Val | Lys | Lys | Pro | Gly | Ala |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Val | Lys | Val | Ser | Cys | Lys | Ala | Phe | Gly | Tyr | Pro | Phe | Thr | Asp | Tyr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Leu | His | Trp | Val | Arg | Gln | Ala | Pro | Gly | Gln | Gly | Leu | Glu | Trp | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Trp | Leu | Asn | Pro | Tyr | Ser | Gly | Asp | Thr | Asn | Tyr | Ala | Gln | Lys | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gln | Gly | Arg | Val | Thr | Met | Thr | Arg | Asp | Thr | Ser | Ile | Ser | Thr | Ala | Tyr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Met | Glu | Leu | Ser | Arg | Leu | Arg | Ser | Asp | Asp | Thr | Ala | Val | Tyr | Tyr | Cys |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Thr | Arg | Ser | Thr | His | Phe | Ser | Ala | Tyr | Phe | Asp | Tyr | Trp | Gly | Gln | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Thr | Met | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Pro | Leu | Ala | Pro | Ser | Ser | Lys | Ser | Thr | Ser | Gly | Gly | Thr | Ala | Ala | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gln | Ser | Ser | Gly | Leu | Tyr | Ser | Leu | Ser | Val | Val | Thr | Val | Pro | Ser |     |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     | 190 |     |     |     |
| Ser | Ser | Leu | Gly | Thr | Gln | Thr | Tyr | Ile | Cys | Asn | Val | Asn | His | Lys | Pro |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ser | Asn | Thr | Lys | Val | Asp | Lys | Lys | Val | Glu | Pro | Lys | Ser | Cys | Asp | Lys |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Thr | His | Thr | Cys | Pro | Pro | Cys | Pro | Ala | Pro | Glu | Leu | Leu | Gly | Gly | Pro |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ser | Val | Phe | Leu | Phe | Pro | Pro | Lys | Pro | Lys | Asp | Thr | Leu | Met | Ile | Ser |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Arg | Thr | Pro | Glu | Val | Thr | Cys | Val | Val | Val | Asp | Val | Ser | His | Glu | Asp |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     |     | 270 |     |
| Pro | Glu | Val | Lys | Phe | Asn | Trp | Tyr | Val | Asp | Gly | Val | Glu | Val | His | Asn |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Ala | Lys | Thr | Lys | Pro | Arg | Glu | Glu | Gln | Tyr | Asn | Ser | Thr | Tyr | Arg | Val |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Val | Ser | Val | Leu | Thr | Val | Leu | His | Gln | Asp | Trp | Leu | Asn | Gly | Lys | Glu |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Tyr | Lys | Cys | Lys | Val | Ser | Asn | Lys | Ala | Leu | Pro | Ala | Pro | Ile | Glu | Lys |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Thr | Ile | Ser | Lys | Ala | Lys | Gly | Gln | Pro | Arg | Glu | Pro | Gln | Val | Tyr | Thr |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Leu | Pro | Pro | Ser | Arg | Asp | Glu | Leu | Thr | Lys | Asn | Gln | Val | Ser | Leu | Thr |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Cys | Leu | Val | Lys | Gly | Phe | Tyr | Pro | Ser | Asp | Ile | Ala | Val | Glu | Trp | Glu |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Ser | Asn | Gly | Gln | Pro | Glu | Asn | Asn | Tyr | Lys | Thr | Thr | Pro | Pro | Val | Leu |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Asp | Ser | Asp | Gly | Ser | Phe | Phe | Leu | Tyr | Ser | Lys | Leu | Thr | Val | Asp | Lys |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Ser | Arg | Trp | Gln | Gln | Gly | Asn | Val | Phe | Ser | Cys | Ser | Val | Met | His | Glu |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Ala | Leu | His | Asn | His | Tyr | Thr | Gln | Lys | Ser | Leu | Ser | Leu | Ser | Pro | Gly |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Lys |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 46  
 <211> 449  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> Cadena pesada con CDR-H3 = Ln4p-65\*

<400> 46

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Gln | Leu | Val | Gln | Ser | Gly | Ala | Glu | Val | Lys | Lys | Pro | Gly | Ala |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Val | Lys | Val | Ser | Cys | Lys | Ala | Phe | Gly | Tyr | Pro | Phe | Thr | Asp | Tyr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Leu | His | Trp | Val | Arg | Gln | Ala | Pro | Gly | Gln | Gly | Leu | Glu | Trp | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Trp | Leu | Asn | Pro | Tyr | Ser | Gly | Asp | Thr | Asn | Tyr | Ala | Gln | Lys | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gln | Gly | Arg | Val | Thr | Met | Thr | Arg | Asp | Thr | Ser | Ile | Ser | Thr | Ala | Tyr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Met | Glu | Leu | Ser | Arg | Leu | Arg | Ser | Asp | Asp | Thr | Ala | Val | Tyr | Tyr | Cys |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ala | Arg | Ser | Gly | Leu | Ile | Met | Asp | Lys | Leu | Asp | Asn | Trp | Gly | Gln | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Thr | Met | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Pro | Leu | Ala | Pro | Ser | Ser | Lys | Ser | Thr | Ser | Gly | Gly | Thr | Ala | Ala | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gln | Ser | Ser | Gly | Leu | Tyr | Ser | Leu | Ser | Ser | Val | Val | Thr | Val | Pro | Ser |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ser | Ser | Leu | Gly | Thr | Gln | Thr | Tyr | Ile | Cys | Asn | Val | Asn | His | Lys | Pro |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ser | Asn | Thr | Lys | Val | Asp | Lys | Lys | Val | Glu | Pro | Lys | Ser | Cys | Asp | Lys |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Thr | His | Thr | Cys | Pro | Pro | Cys | Pro | Ala | Pro | Glu | Leu | Leu | Gly | Gly | Pro |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ser | Val | Phe | Leu | Phe | Pro | Pro | Lys | Pro | Lys | Asp | Thr | Leu | Met | Ile | Ser |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Arg | Thr | Pro | Glu | Val | Thr | Cys | Val | Val | Val | Asp | Val | Ser | His | Glu | Asp |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Pro | Glu | Val | Lys | Phe | Asn | Trp | Tyr | Val | Asp | Gly | Val | Glu | Val | His | Asn |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Ala | Lys | Thr | Lys | Pro | Arg | Glu | Gln | Tyr | Asn | Ser | Thr | Tyr | Arg | Val |     |
|     | 290 |     |     |     |     | 295 |     |     |     | 300 |     |     |     |     |     |
| Val | Ser | Val | Leu | Thr | Val | Leu | His | Gln | Asp | Trp | Leu | Asn | Gly | Lys | Glu |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Tyr | Lys | Cys | Lys | Val | Ser | Asn | Lys | Ala | Leu | Pro | Ala | Pro | Ile | Glu | Lys |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Thr | Ile | Ser | Lys | Ala | Lys | Gly | Gln | Pro | Arg | Glu | Pro | Gln | Val | Tyr | Thr |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Leu | Pro | Pro | Ser | Arg | Asp | Glu | Leu | Thr | Lys | Asn | Gln | Val | Ser | Leu | Thr |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Cys | Leu | Val | Lys | Gly | Phe | Tyr | Pro | Ser | Asp | Ile | Ala | Val | Glu | Trp | Glu |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Ser | Asn | Gly | Gln | Pro | Glu | Asn | Asn | Tyr | Lys | Thr | Pro | Pro | Val | Leu |     |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Asp | Ser | Asp | Gly | Ser | Phe | Phe | Leu | Tyr | Ser | Lys | Leu | Thr | Val | Asp | Lys |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Ser | Arg | Trp | Gln | Gln | Gly | Asn | Val | Phe | Ser | Cys | Ser | Val | Met | His | Glu |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Ala | Leu | His | Asn | His | Tyr | Thr | Gln | Lys | Ser | Leu | Ser | Leu | Ser | Pro | Gly |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Lys |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 47  
 <211> 449  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> Cadena pesada con CDR-H3 = Ln4p-90\*

<400> 47

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Gln | Leu | Val | Gln | Ser | Gly | Ala | Glu | Val | Lys | Lys | Pro | Gly | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Val | Lys | Val | Ser | Cys | Lys | Ala | Phe | Gly | Tyr | Pro | Phe | Thr | Asp | Tyr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Leu | His | Trp | Val | Arg | Gln | Ala | Pro | Gly | Gln | Gly | Leu | Glu | Trp | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Trp | Leu | Asn | Pro | Tyr | Ser | Gly | Asp | Thr | Asn | Tyr | Ala | Gln | Lys | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gln | Gly | Arg | Val | Thr | Met | Thr | Arg | Asp | Thr | Ser | Ile | Ser | Thr | Ala | Tyr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Met | Glu | Leu | Ser | Arg | Leu | Arg | Ser | Asp | Asp | Thr | Ala | Val | Tyr | Tyr | Cys |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ala | Arg | Ser | Gly | Leu | Ile | Ile | Asp | Asn | Leu | Asn | Pro | Trp | Gly | Gln | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Thr | Met | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Pro | Leu | Ala | Pro | Ser | Ser | Lys | Ser | Thr | Ser | Gly | Gly | Thr | Ala | Ala | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gln | Ser | Ser | Gly | Leu | Tyr | Ser | Leu | Ser | Val | Val | Thr | Val | Pro | Ser |     |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ser | Ser | Leu | Gly | Thr | Gln | Thr | Tyr | Ile | Cys | Asn | Val | Asn | His | Lys | Pro |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ser | Asn | Thr | Lys | Val | Asp | Lys | Lys | Val | Glu | Pro | Lys | Ser | Cys | Asp | Lys |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Thr | His | Thr | Cys | Pro | Pro | Cys | Pro | Ala | Pro | Glu | Leu | Leu | Gly | Gly | Pro |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ser | Val | Phe | Leu | Phe | Pro | Pro | Lys | Pro | Lys | Asp | Thr | Leu | Met | Ile | Ser |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Arg | Thr | Pro | Glu | Val | Thr | Cys | Val | Val | Val | Asp | Val | Ser | His | Glu | Asp |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Pro | Glu | Val | Lys | Phe | Asn | Trp | Tyr | Val | Asp | Gly | Val | Glu | Val | His | Asn |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Ala | Lys | Thr | Lys | Pro | Arg | Glu | Glu | Gln | Tyr | Asn | Ser | Thr | Tyr | Arg | Val |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Val | Ser | Val | Leu | Thr | Val | Leu | His | Gln | Asp | Trp | Leu | Asn | Gly | Lys | Glu |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Tyr | Lys | Cys | Lys | Val | Ser | Asn | Lys | Ala | Leu | Pro | Ala | Pro | Ile | Glu | Lys |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Thr | Ile | Ser | Lys | Ala | Lys | Gly | Gln | Pro | Arg | Glu | Pro | Gln | Val | Tyr | Thr |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Leu | Pro | Pro | Ser | Arg | Asp | Glu | Leu | Thr | Lys | Asn | Gln | Val | Ser | Leu | Thr |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Cys | Leu | Val | Lys | Gly | Phe | Tyr | Pro | Ser | Asp | Ile | Ala | Val | Glu | Trp | Glu |
|     | 370 |     |     |     |     | 375 |     |     |     | 380 |     |     |     |     |     |
| Ser | Asn | Gly | Gln | Pro | Glu | Asn | Asn | Tyr | Lys | Thr | Thr | Pro | Pro | Val | Leu |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Asp | Ser | Asp | Gly | Ser | Phe | Phe | Leu | Tyr | Ser | Lys | Leu | Thr | Val | Asp | Lys |
|     |     |     | 405 |     |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Ser | Arg | Trp | Gln | Gly | Asn | Val | Phe | Ser | Cys | Ser | Val | Met | His | Glu |     |
|     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |     |
| Ala | Leu | His | Asn | His | Tyr | Thr | Gln | Lys | Ser | Leu | Ser | Leu | Ser | Pro | Gly |

435 440 445  
 Lys  
  
 <210> 48  
 <211> 449  
 <212> PRT  
 <213> secuencia artificial  
  
 <220>  
 <223> Cadena pesada con CDR-H3 = 3077\*  
  
 <400> 48  
  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 25 30  
 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  
 35 40 45  
 Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Thr Arg Ser Gly Leu Ile Ala Val Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu  
 130 135 140  
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 150 155 160  
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 170 175  
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Val Val Thr Val Pro Ser  
 180 185 190  
 Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro  
 195 200 205  
 Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys  
 210 215 220  
 Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
 225 230 235 240  
 Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
 245 250 255  
 Arg Thr Pro Glu Val Thr Cys Val Val Asp Val Ser His Glu Asp  
 260 265 270  
 Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn  
 275 280 285  
 Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
 290 295 300  
 Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
 305 310 315 320  
 Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
 325 330 335  
 Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
 340 345 350  
 Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr  
 355 360 365  
 Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu  
 370 375 380  
 Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
 385 390 395 400  
 Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
 405 410 415  
 Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu

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Ala Leu His 420 Asn His Tyr Thr Gln 425 Lys Ser Leu Ser Leu 430 Pro Gly  
 435 440 445  
 Lys

<210> 49  
 <211> 127  
 <212> PRT  
 <213> GM-CSF humano

<400> 49

Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15  
 Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30  
 Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp  
 35 40 45  
 Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
 50 55 60  
 Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80  
 Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys  
 85 90 95  
 Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp  
 100 105 110  
 Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu  
 115 120 125

<210> 50  
 <211> 127  
 <212> PRT  
 <213> GM-CSF de macaco

<400> 50

Ala Pro Ala Arg Ser Pro Ser Pro Gly Thr Gln Pro Trp Glu His Val  
 1 5 10 15  
 Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30  
 Ala Ala Glu Met Asn Lys Thr Val Glu Val Val Ser Glu Met Phe Asp  
 35 40 45  
 Leu Gln Glu Pro Ser Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
 50 55 60  
 Gly Leu Gln Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80  
 Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys  
 85 90 95  
 Ala Thr Gln Ile Ile Thr Phe Gln Ser Phe Lys Glu Asn Leu Lys Asp  
 100 105 110  
 Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu  
 115 120 125

<210> 51  
 <211> 127  
 <212> PRT  
 <213> GM-CSF de gibón

<400> 51

Ala Pro Ser Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15  
 Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30

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Ala Ala Glu Ile Asn Glu Thr Val Glu Val Val Ser Glu Met Phe Asp  
 35 40 45  
 Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
 50 55 60  
 Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80  
 Ala Ser His Tyr Lys Gln His Cys Pro Thr Pro Glu Thr Ser Cys  
 85 90 95  
 Ala Thr Gln Ile Ile Ile Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp  
 100 105 110  
 Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Gly  
 115 120 125

<210> 52  
 <211> 119  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> VH con CDR-H3 7B1-502

<400> 52

Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 25 30  
 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  
 35 40 45  
 Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Thr Arg Thr Thr Leu Ile Ser Val Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser  
 115

<210> 53  
 <211> 119  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> VH con CDR-H3 3077

<400> 53

Glu Val Gln Leu Leu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Phe Gly Tyr Pro Phe Thr Asp Tyr  
 20 25 30  
 Leu Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  
 35 40 45  
 Gly Trp Leu Asn Pro Tyr Ser Gly Asp Thr Asn Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Thr Arg Ser Gly Leu Ile Ala Val Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser  
 115

<210> 54  
 <211> 107  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> VL 5-306

<400> 54

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Glu Leu Val Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1      5      10      15
Asp Arg Val Thr Ile Ala Cys Arg Ala Ser Gln Asn Ile Arg Asn Ile
      20      25      30
Leu Asn Trp Tyr Gln Gln Arg Pro Gly Lys Ala Pro Gln Leu Leu Ile
      35      40      45
Tyr Ala Ala Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
      50      55      60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Gln Pro
65      70      75      80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Met Pro Arg
      85      90      95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
      100      105

```

<210> 55  
 <211> 107  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> VL 5-306\* V-version

<400> 55

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1      5      10      15
Asp Arg Val Thr Ile Ala Cys Arg Ala Ser Gln Asn Ile Arg Asn Ile
      20      25      30
Leu Asn Trp Tyr Gln Gln Arg Pro Gly Lys Ala Pro Gln Leu Leu Ile
      35      40      45
Tyr Ala Ala Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
      50      55      60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Gln Pro
65      70      75      80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Met Pro Arg
      85      90      95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
      100      105

```

<210> 56  
 <211> 10  
 <212> PRT  
 <213> secuencia artificial

<220>  
 <223> CDR-H3 3077

<400> 56

```

Ser Gly Leu Ile Ala Val Tyr Phe Asp Tyr
1      5      10

```

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<210> 57  
 <211> 127  
 <212> PRT  
 <213> humano

<400> 57

Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15

Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30

Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp  
 35 40 45

Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
 50 55 60

Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80

Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys  
 85 90 95

Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp  
 100 105 110

Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu  
 115 120 125

<210> 58  
 <211> 127  
 <212> PRT  
 <213> Gibón

<400> 58

Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15

Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30

Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp  
 35 40 45

Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
 50 55 60

Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80

Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys

Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp  
                   100                  105                  110

Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu  
           115                  120                  125

<210> 59  
 <211> 127  
 <212> PRT  
 <213> mono rhesus

<400> 59

Ala Pro Ala Arg Ser Pro Ser Pro Gly Thr Gln Pro Trp Glu His Val  
 1                  5                  10                  15

Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
           20                  25                  30

Ala Ala Glu Met Asn Lys Thr Val Glu Val Val Ser Glu Met Phe Asp  
           35                  40                  45

Leu Gln Glu Pro Ser Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
           50                  55                  60

Gly Leu Gln Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65                  70                  75                  80

Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys  
           85                  90                  95

Ala Thr Gln Ile Ile Thr Phe Gln Ser Phe Lys Glu Asn Leu Lys Asp  
                   100                  105                  110

Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu  
           115                  120                  125

<210> 60  
 <211> 127  
 <212> PRT  
 <213> mono cinomolgo

<400> 60

Ala Pro Ala Arg Ser Pro Ser Pro Gly Thr Gln Pro Trp Glu His Val  
 1                  5                  10                  15

Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
           20                  25                  30

Ala Ala Glu Met Asn Lys Thr Val Glu Val Val Ser Glu Met Phe Asp  
           35                  40                  45

852497.TXT

Leu Gln Glu Pro Ser Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
50 55 60

Gly Leu Gln Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
65 70 75 80

Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys  
85 90 95

Ala Thr Gln Ile Ile Thr Phe Gln Ser Phe Lys Glu Asn Leu Lys Asp  
100 105 110

Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu  
115 120 125