

eolf-seql.txt
SEQUENCE LISTING

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<110>  Boehringer Ingelheim International GmbH

<120>  VERFAHREN ZUR OPTIMIERUNG VON PROTEINEN, DIE DAS
      IMMUNOGLOBULINFALTUNGSMUSTER AUFWEISEN

<130>  P01-2526/WO/1

<160>  16

<170>  PatentIn version 3.3

<210>  1
<211>  107
<212>  PRT
<213>  Mus musculus

<220>
<221>  misc_feature
<223>  CL WT

<400>  1

Gly Ser His Met Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser
1      5      10      15

Glu Gln Leu Thr Ser Gly Gly Ala Ser Val Val Cys Phe Leu Asn Asn
      20      25      30

Phe Tyr Pro Lys Asp Ile Asn Val Lys Trp Lys Ile Asp Gly Ser Glu
      35      40      45

Arg Gln Asn Gly Val Leu Asn Ser Trp Thr Asp Gln Asp Ser Lys Asp
      50      55      60

Ser Thr Tyr Ser Met Ser Ser Thr Leu Thr Leu Thr Lys Asp Glu Tyr
65      70      75      80

Glu Arg His Asn Ser Tyr Thr Cys Glu Ala Thr His Lys Thr Ser Thr
      85      90      95

Ser Pro Ile Val Lys Ser Phe Asn Arg Asn Glu
      100     105

<210>  2
<211>  100
<212>  PRT
<213>  Artificial

<220>
<223>  CL to beta2m

<400>  2

Met Ala Ala Pro Thr Val Ser Ile Phe Pro Arg His Pro Ala Glu Asn

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

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<210> 3
<211> 100
<212> PRT
<213> Homo sapiens

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<220>
<221> misc_feature
<223> Beta2 Microglobulin WT

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<400> 3

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

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100

<210> 4
 <211> 107
 <212> PRT
 <213> Artificial

<220>
 <223> beta2m to CL

<400> 4

Met Gly Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg Pro Pro
 1 5 10 15

Ser Ser Glu Gln Leu Thr Ser Gly Gly Asn Phe Leu Asn Cys Tyr Val
 20 25 30

Ser Gly Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly
 35 40 45

Glu Arg Ile Glu Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp
 50 55 60

Trp Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu Phe Thr Lys Asp Glu Tyr
 65 70 75 80

Glu Arg His Asp Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser
 85 90 95

Gln Pro Lys Ile Val Lys Trp Asp Arg Asp Met
 100 105

<210> 5
 <211> 108
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> IgG1 CH2

<400> 5

Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
 1 5 10 15

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
 20 25 30

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
 35 40 45

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Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
50 55 60

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
65 70 75 80

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
85 90 95

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
100 105

<210> 6
<211> 109
<212> PRT
<213> Artificial

<220>
<223> CH2 Helix1 Mutante

<400> 6

Met Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Ala
1 5 10 15

Glu Asp Thr Leu His Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
20 25 30

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
35 40 45

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
50 55 60

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
65 70 75 80

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
85 90 95

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
100 105

<210> 7
<211> 107
<212> PRT
<213> Artificial

<220>
<223> P35A-Mutante von murinem Ig kappa C

<400> 7

eolf-seql.txt

Gly Ser His Met Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser
1 5 10 15

Glu Gln Leu Thr Ser Gly Gly Ala Ser Val Val Cys Phe Leu Asn Asn
20 25 30

Phe Tyr Ala Lys Asp Ile Asn Val Lys Trp Lys Ile Asp Gly Ser Glu
35 40 45

Arg Gln Asn Gly Val Leu Asn Ser Trp Thr Asp Gln Asp Ser Lys Asp
50 55 60

Ser Thr Tyr Ser Met Ser Ser Thr Leu Thr Leu Thr Lys Asp Glu Tyr
65 70 75 80

Glu Arg His Asn Ser Tyr Thr Cys Glu Ala Thr His Lys Thr Ser Thr
85 90 95

Ser Pro Ile Val Lys Ser Phe Asn Arg Asn Glu
100 105

<210> 8
<211> 10
<212> PRT
<213> Homo sapiens

<220>
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<223> Helixmotiv aus IgG1 CH2

<400> 8

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
1 5 10

<210> 9
<211> 10
<212> PRT
<213> Artificial

<220>
<223> Optimiertes Helixmotiv aus IgG1 CH2

<400> 9

Lys Ala Glu Asp Thr Leu His Ile Ser Arg
1 5 10

<210> 10
<211> 8
<212> PRT
<213> Mus musculus

<220>
 <221> misc_feature
 <223> Helixmotiv aus der murinen leichten kappa Kette CL

<400> 10

Thr Lys Asp Glu Tyr Glu Arg His
 1 5

<210> 11
 <211> 9
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Helixmotiv aus der humanen CL-Domane der leichten kappa Kette

<400> 11

Ser Lys Ala Asp Tyr Glu Lys His Lys
 1 5

<210> 12
 <211> 106
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> humane CL-Domane der leichten kappa Kette

<400> 12

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
 1 5 10 15

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

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
 35 40 45

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
 50 55 60

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
 65 70 75 80

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

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys

100 eolf-seql.txt
105

<210> 13
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> humane CL-Domane der leichten lambda Kette

<400> 13

Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu
1 5 10 15

Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe
20 25 30

Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Gly Asp Ser Ser Pro Val
35 40 45

Lys Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys
50 55 60

Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser
65 70 75 80

His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu
85 90 95

Lys Thr Val Ala Pro Thr Glu Cys Ser
100 105

<210> 14
<211> 109
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> humane CH2-Domane der schweren IgG2 Kette

<400> 14

Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
1 5 10 15

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
20 25 30

Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val

35

40

45

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
 50 55 60

Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His Gln
 65 70 75 80

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly
 85 90 95

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys
 100 105

<210> 15

<211> 110

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> humane CH2-Domane der schweren IgG4 Kette

<400> 15

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

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
 20 25 30

Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
 35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
 50 55 60

Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
 65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
 85 90 95

Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys
 100 105 110

<210> 16

<211> 10

<212> PRT

<213> Homo sapiens

eolf-seql.txt

<220>

<221> misc_feature

<223> Helixmotiv aus der humanen leichten lambda Kette CL

<400> 16

Thr	Pro	Glu	Gln	Trp	Lys	Ser	His	Arg	Ser
1				5					10