

sequence listing.txt
SEQUENCE LISTING

<110> Affimed GmbH
<120> CD3 binding domain
<130> A 3268
<150> PCT/EP2014/002177
<151> 2014-08-07
<160> 18
<170> BISSAP 1.0
<210> 1
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
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<222> 1..110
<223> /mol_type="protein"
/note="VL of var_w"
/organism="Artificial Sequence"

<400> 1
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr
20 25 30
Ser Asn Tyr Ala Asn Trp Val Gln Gln Lys Pro Gly Lys Ala Pro Lys
35 40 45
Gly Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Val Pro Ser Arg
50 55 60
Phe Ser Gly Ser Leu Ile Gly Asp Lys Ala Thr Leu Thr Ile Ser Ser
65 70 75 80
Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Leu Trp Tyr Ser
85 90 95
Asn Leu Trp Val Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 2
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> SOURCE
<222> 1..110
<223> /mol_type="protein"
/note="VL of var_x"
/organism="Artificial Sequence"

<400> 2
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr
20 25 30
Ser Asn Tyr Ala Asn Trp Val Gln Gln Lys Pro Gly Lys Ala Pro Lys
35 40 45
Gly Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Val Pro Ala Arg
50 55 60
Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
65 70 75 80
Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Leu Trp Tyr Ser
85 90 95

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Asn Leu Trp Val Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 3
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> SOURCE
<222> 1..110
<223> /mol_type="protein"
/note="VL of var_y"
/organism="Artificial Sequence"

<400> 3
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr
20 25 30
Ser Asn Tyr Ala Asn Trp Val Gln Gln Lys Pro Gly Lys Ala Pro Lys
35 40 45
Ala Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Val Pro Ser Arg
50 55 60
Phe Ser Gly Ser Leu Ile Gly Asp Lys Ala Thr Leu Thr Ile Ser Ser
65 70 75 80
Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Leu Trp Tyr Ser
85 90 95
Asn Leu Trp Val Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 4
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> SOURCE
<222> 1..110
<223> /mol_type="protein"
/note="VL of var_z"
/organism="Artificial Sequence"

<400> 4
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr
20 25 30
Ser Asn Tyr Ala Asn Trp Val Gln Gln Lys Pro Gly Lys Ala Pro Lys
35 40 45
Gly Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Val Pro Ser Arg
50 55 60
Phe Ser Gly Ser Leu Ile Gly Asp Lys Ala Thr Leu Thr Ile Ser Ser
65 70 75 80
Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Leu Trp Tyr Ser
85 90 95
Asn Leu Trp Val Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 5
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
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<222> 1..109
<223> /mol_type="protein"

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/note="VL of murine SP34"
 /organism="Artificial Sequence"

<400> 5
 Gln Ala Val Val Thr Gln Glu Ser Ala Leu Thr Thr Ser Pro Gly Glu
 1 5 10 15
 Thr Val Thr Leu Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr Ser
 20 25 30
 Asn Tyr Ala Asn Trp Val Gln Glu Lys Pro Asp His Leu Phe Thr Gly
 35 40 45
 Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Val Pro Ala Arg Phe
 50 55 60
 Ser Gly Ser Leu Ile Gly Asp Lys Ala Ala Leu Thr Ile Thr Gly Ala
 65 70 75 80
 Gln Thr Glu Asp Glu Ala Ile Tyr Phe Cys Ala Leu Trp Tyr Ser Asn
 85 90 95
 Leu Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 6
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 <212> PRT
 <213> Artificial Sequence

<220>
 <221> SOURCE
 <222> 1..125
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 /organism="Artificial Sequence"

<400> 6
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr
 20 25 30
 Ala Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Gly Arg Ile Arg Ser Lys Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp
 50 55 60
 Ser Val Lys Asp Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Ser
 65 70 75 80
 Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 Tyr Cys Ala Arg His Gly Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe
 100 105 110
 Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 7
 <211> 125
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> SOURCE
 <222> 1..125
 <223> /mol_type="protein"
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 /organism="Artificial Sequence"

<400> 7
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr
 20 25 30
 Ala Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

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

<210> 8
 <211> 125
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> SOURCE
 <222> 1..125
 <223> /mol_type="protein"
 /note="VH of var_y"
 /organism="Artificial Sequence"

<400> 8
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr
 20 25 30
 Ala Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Gly Arg Ile Arg Ser Lys Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp
 50 55 60
 Ser Val Lys Asp Arg Phe Thr Ile Ser Arg Asp Ser Lys Asn Ser
 65 70 75 80
 Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 Tyr Cys Ala Arg His Gly Asn Phe Gly Asn Ser Tyr Val Ser Tyr Phe
 100 105 110
 Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 9
 <211> 125
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> SOURCE
 <222> 1..125
 <223> /mol_type="protein"
 /note="VH of var_z"
 /organism="Artificial Sequence"

<400> 9
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr
 20 25 30
 Ala Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Gly Arg Ile Arg Ser Lys Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp
 50 55 60
 Ser Val Lys Asp Arg Phe Thr Ile Ser Arg Asp Ser Lys Asn Ser
 65 70 75 80
 Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 Tyr Cys Ala Arg His Gly Asn Phe Gly Asn Ser Tyr Val Ser His Phe
 100 105 110

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Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 10
 <211> 125
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> SOURCE
 <222> 1..125
 <223> /mol_type="protein"
 /note="VH of murine SP34"
 /organism="Artificial Sequence"

<400> 10
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Lys Gly
 1 5 10 15
 Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asn Thr Tyr
 20 25 30
 Ala Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Arg Ile Arg Ser Lys Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp
 50 55 60
 Ser Val Lys Asp Arg Phe Thr Ile Ser Arg Asp Asp Ser Gln Ser Ile
 65 70 75 80
 Leu Tyr Leu Gln Met Asn Asn Leu Lys Thr Glu Asp Thr Ala Met Tyr
 85 90 95
 Tyr Cys Val Arg His Gly Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe
 100 105 110
 Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 11
 <211> 494
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> SOURCE
 <222> 1..494
 <223> /mol_type="protein"
 /note="TandAb D"
 /organism="Artificial Sequence"

<400> 11
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr
 20 25 30
 Ser Asn Tyr Ala Asn Trp Val Gln Lys Pro Gly Lys Ala Pro Lys
 35 40 45
 Ala Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Val Pro Ser Arg
 50 55 60
 Phe Ser Gly Ser Leu Ile Gly Asp Lys Ala Thr Leu Thr Ile Ser Ser
 65 70 75 80
 Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Leu Trp Tyr Ser
 85 90 95
 Asn Leu Trp Val Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Gly Gly
 100 105 110
 Ser Gly Gly Ser Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys
 115 120 125
 Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser
 130 135 140
 Phe Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly
 145 150 155 160
 Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr
 165 170 175

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Ser Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile
180 185 190
Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
195 200 205
Met Tyr Tyr Cys Ala Arg Leu Gly Ser Ser Trp Thr Asn Asp Ala Phe
210 215 220
Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Ser
225 230 235 240
Gly Gly Ser Ser Tyr Glu Leu Thr Gln Pro Ser Val Ser Val Ser
245 250 255
Pro Gly Gln Thr Ala Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Lys
260 265 270
Gln Tyr Ala Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu
275 280 285
Val Ile Tyr Lys Asp Ser Glu Arg Pro Ser Gly Ile Pro Glu Arg Phe
290 295 300
Ser Gly Ser Ser Ser Gly Thr Thr Val Thr Leu Thr Ile Ser Gly Val
305 310 315 320
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Ala Asp Ser Ser
325 330 335
Gly Thr Pro Leu Ile Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
340 345 350
Gly Gly Ser Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
355 360 365
Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
370 375 380
Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg Gln Ala Pro Gly
385 390 395 400
Lys Gly Leu Glu Trp Val Gly Arg Ile Arg Ser Lys Tyr Asn Asn Tyr
405 410 415
Ala Thr Tyr Tyr Ala Asp Ser Val Lys Asp Arg Phe Thr Ile Ser Arg
420 425 430
Asp Asp Ser Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr
435 440 445
Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg His Gly Asn Phe Gly Asn
450 455 460
Ser Tyr Val Ser Tyr Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
465 470 475 480
Val Ser Ser Ala Ala Ala Gly Ser His His His His His
485 490

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<210> 12
<211> 494
<212> PRT
<213> Artificial Sequence

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<220>
<221> SOURCE
<222> 1..494
<223> /mol_type="protein"
      /note="TandAb E"
      /organism="Artificial Sequence"

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<400> 12
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ser Thr Gly Ala Val Thr Thr
20 25 30
Ser Asn Tyr Ala Asn Trp Val Gln Gln Lys Pro Gly Lys Ala Pro Lys
35 40 45
Gly Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Val Pro Ser Arg
50 55 60
Phe Ser Gly Ser Leu Ile Gly Asp Lys Ala Thr Leu Thr Ile Ser Ser
65 70 75 80
Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Leu Trp Tyr Ser
85 90 95
Asn Leu Trp Val Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Gly Gly
100 105 110

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Ser Gly Gly Ser Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys
115 120 125
Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser
130 135 140
Phe Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly
145 150 155 160
Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr
165 170 175
Ser Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile
180 185 190
Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
195 200 205
Met Tyr Tyr Cys Ala Arg Leu Gly Ser Ser Trp Thr Asn Asp Ala Phe
210 215 220
Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Ser
225 230 235 240
Gly Gly Ser Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser
245 250 255
Pro Gly Gln Thr Ala Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Lys
260 265 270
Gln Tyr Ala Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu
275 280 285
Val Ile Tyr Lys Asp Ser Glu Arg Pro Ser Gly Ile Pro Glu Arg Phe
290 295 300
Ser Gly Ser Ser Ser Gly Thr Thr Val Thr Leu Thr Ile Ser Gly Val
305 310 315 320
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Ala Asp Ser Ser
325 330 335
Gly Thr Pro Leu Ile Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
340 345 350
Gly Gly Ser Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
355 360 365
Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
370 375 380
Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg Gln Ala Pro Gly
385 390 395 400
Lys Gly Leu Glu Trp Val Gly Arg Ile Arg Ser Lys Tyr Asn Asn Tyr
405 410 415
Ala Thr Tyr Tyr Ala Asp Ser Val Lys Asp Arg Phe Thr Ile Ser Arg
420 425 430
Asp Asp Ser Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr
435 440 445
Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg His Gly Asn Phe Gly Asn
450 455 460
Ser Tyr Val Ser His Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
465 470 475 480
Val Ser Ser Ala Ala Ala Gly Ser His His His His His His
485 490

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<210> 13
<211> 493
<212> PRT
<213> Artificial Sequence

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<220>
<221> SOURCE
<222> 1..493
<223> /mol_type="protein"
      /note="TandAb F"
      /organism="Artificial Sequence"

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<400> 13
Gln Ala Val Val Thr Gln Glu Ser Ala Leu Thr Thr Ser Pro Gly Glu
1 5 10 15
Thr Val Thr Leu Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr Ser
20 25 30
Asn Tyr Ala Asn Trp Val Gln Glu Lys Pro Asp His Leu Phe Thr Gly
35 40 45

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Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Val Pro Ala Arg Phe
50      55      60
Ser Gly Ser Leu Ile Gly Asp Lys Ala Ala Leu Thr Ile Thr Gly Ala
65      70      75      80
Gln Thr Glu Asp Glu Ala Ile Tyr Phe Cys Ala Leu Trp Tyr Ser Asn
85      90      95
Leu Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gly Ser
100     105     110
Gly Gly Ser Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
115     120     125
Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe
130     135     140
Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu
145     150     155     160
Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser
165     170     175
Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser
180     185     190
Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met
195     200     205
Tyr Tyr Cys Ala Arg Leu Gly Ser Ser Trp Thr Asn Asp Ala Phe Asp
210     215     220
Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Ser Gly
225     230     235     240
Gly Ser Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro
245     250     255
Gly Gln Thr Ala Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Lys Gln
260     265     270
Tyr Ala Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val
275     280     285
Ile Tyr Lys Asp Ser Glu Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser
290     295     300
Gly Ser Ser Ser Gly Thr Thr Val Thr Leu Thr Ile Ser Gly Val Gln
305     310     315     320
Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Ala Asp Ser Ser Gly
325     330     335
Thr Pro Leu Ile Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly
340     345     350
Gly Ser Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
355     360     365
Val Gln Pro Lys Gly Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe
370     375     380
Thr Phe Asn Thr Tyr Ala Met Asn Trp Val Arg Gln Ala Pro Gly Lys
385     390     395     400
Gly Leu Glu Trp Val Ala Arg Ile Arg Ser Lys Tyr Asn Asn Tyr Ala
405     410     415
Thr Tyr Tyr Ala Asp Ser Val Lys Asp Arg Phe Thr Ile Ser Arg Asp
420     425     430
Asp Ser Gln Ser Ile Leu Tyr Leu Gln Met Asn Asn Leu Lys Thr Glu
435     440     445
Asp Thr Ala Met Tyr Tyr Cys Val Arg His Gly Asn Phe Gly Asn Ser
450     455     460
Tyr Val Ser Trp Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
465     470     475     480
Ser Ser Ala Ala Ala Gly Ser His His His His His
485     490

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<210> 14
 <211> 494
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> SOURCE
 <222> 1..494
 <223> /mol_type="protein"
 /note="TandAb G"
 /organism="Artificial Sequence"

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<400> 14

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1      5      10      15
Asp Arg Val Thr Ile Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr
      20      25      30
Ser Asn Tyr Ala Asn Trp Val Gln Gln Lys Pro Gly Lys Ala Pro Lys
      35      40      45
Gly Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Val Pro Ser Arg
      50      55      60
Phe Ser Gly Ser Leu Ile Gly Asp Lys Ala Thr Leu Thr Ile Ser Ser
65      70      75      80
Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Leu Trp Tyr Ser
      85      90      95
Asn Leu Trp Val Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Gly Gly
      100      105      110
Ser Gly Gly Ser Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys
      115      120      125
Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser
      130      135      140
Phe Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly
145      150      155      160
Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr
      165      170      175
Ser Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile
      180      185      190
Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
      195      200      205
Met Tyr Tyr Cys Ala Arg Leu Gly Ser Ser Trp Thr Asn Asp Ala Phe
      210      215      220
Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Ser
225      230      235      240
Gly Gly Ser Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser
      245      250      255
Pro Gly Gln Thr Ala Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Lys
      260      265      270
Gln Tyr Ala Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu
      275      280      285
Val Ile Tyr Lys Asp Ser Glu Arg Pro Ser Gly Ile Pro Glu Arg Phe
      290      295      300
Ser Gly Ser Ser Ser Gly Thr Thr Val Thr Leu Thr Ile Ser Gly Val
305      310      315      320
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Ala Asp Ser Ser
      325      330      335
Gly Thr Pro Leu Ile Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
      340      345      350
Gly Gly Ser Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
      355      360      365
Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
      370      375      380
Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg Gln Ala Pro Gly
385      390      395      400
Lys Gly Leu Glu Trp Val Gly Arg Ile Arg Ser Lys Tyr Asn Asn Tyr
      405      410      415
Ala Thr Tyr Tyr Ala Asp Ser Val Lys Asp Arg Phe Thr Ile Ser Arg
      420      425      430
Asp Asp Ser Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr
      435      440      445
Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg His Gly Asn Phe Gly Asn
      450      455      460
Ser Tyr Val Ser Trp Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
465      470      475      480
Val Ser Ser Ala Ala Ala Gly Ser His His His His His
      485      490

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<210> 15

<211> 494

<212> PRT

<213> Artificial Sequence

<220>

<221> SOURCE

<222> 1..494

<223> /mol_type="protein"

/note="TandAb H"

/organism="Artificial Sequence"

<400> 15

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1      5      10      15
Asp Arg Val Thr Ile Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr
      20      25      30
Ser Asn Tyr Ala Asn Trp Val Gln Gln Lys Pro Gly Lys Ala Pro Lys
      35      40      45
Gly Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Val Pro Ala Arg
      50      55      60
Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
65      70      75      80
Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Leu Trp Tyr Ser
      85      90      95
Asn Leu Trp Val Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Gly Gly
      100      105      110
Ser Gly Gly Ser Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys
      115      120      125
Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser
      130      135      140
Phe Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly
145      150      155      160
Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr
      165      170      175
Ser Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile
      180      185      190
Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
      195      200      205
Met Tyr Tyr Cys Ala Arg Leu Gly Ser Ser Trp Thr Asn Asp Ala Phe
210      215      220
Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Ser
225      230      235      240
Gly Gly Ser Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser
      245      250      255
Pro Gly Gln Thr Ala Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Lys
      260      265      270
Gln Tyr Ala Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu
      275      280      285
Val Ile Tyr Lys Asp Ser Glu Arg Pro Ser Gly Ile Pro Glu Arg Phe
290      295      300
Ser Gly Ser Ser Ser Gly Thr Thr Val Thr Leu Thr Ile Ser Gly Val
305      310      315      320
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Ala Asp Ser Ser
      325      330      335
Gly Thr Pro Leu Ile Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
      340      345      350
Gly Gly Ser Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
      355      360      365
Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
      370      375      380
Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg Gln Ala Pro Gly
385      390      395      400
Lys Gly Leu Glu Trp Val Gly Arg Ile Arg Ser Lys Tyr Asn Asn Tyr
      405      410      415
Ala Thr Tyr Tyr Ala Asp Ser Val Lys Asp Arg Phe Thr Ile Ser Arg
      420      425      430
Asp Asp Ser Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr
      435      440      445
Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg His Gly Asn Phe Gly Asn
450      455      460

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sequence listing.txt

Ser Tyr Val Ser Trp Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
 465 470 475 480
 Val Ser Ser Ala Ala Ala Gly Ser His His His His His
 485 490

<210> 16
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> SOURCE
 <222> 1..6
 <223> /mol_type="protein"
 /note="peptide linker"
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<400> 16
 Gly Gly Ser Gly Gly Ser
 1 5

<210> 17
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> SOURCE
 <222> 1..4
 <223> /mol_type="protein"
 /note="peptide linker"
 /organism="Artificial Sequence"

<400> 17
 Gly Gly Ser Gly
 1

<210> 18
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> SOURCE
 <222> 1..5
 <223> /mol_type="protein"
 /note="peptide linker"
 /organism="Artificial Sequence"

<400> 18
 Gly Gly Ser Gly Gly
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