SEQUENCE LISTING

<110> GlycArt Biotechnology AG

<120> Modified Antigen Binding Molecules with Altered Cell Signaling Activity

<130> 1975.056PC01

<150> US 60/711,454
<151> 2005-08-26

<160> 134

<170> PatentIn version 3.3

<210> 1
<211> 357
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<220>
<223> B-HH1 construct of a mouse/human modified antigen binding molecule

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tcctgcaagg cttccggata caccttcagc tattcttgga tgagctgggt gcggcaggcc 120

cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

gcacagaaat tccaaggaag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

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

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 3
<211> 357
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<220>
<223> B-HH2 construct of a mouse/human modified antigen binding molecule

<400> 3
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tcctgcaagg cttccggata cgccttcagc tattcttgga tgaactgggt gcggcaggcc 120

cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

aatgggaaat tcaagggcag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

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<210> 4
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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser

20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 5
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tcctgcaagg cttccggata cgccttcagc tattcttgga tgaactgggt gcggcaggcc 120

cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

aatgggaaat tcaagggcag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt atctgtgtgc aagaaatgtc 300

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agcacc 366

<210> 6
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<220>
<223> B-HH3 construct of a mouse/human modified antigen binding molecule

<400> 6

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1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

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cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

aatgggaaat tcaagggcag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctca 357

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<213> Artificial Sequence

<220>
<223> B-HH4 construct of a mouse/human modified antigen binding molecule

<400> 8

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1 5 10 15

Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Ala Phe Ser Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 9
<211> 357
<212> DNA
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<220>
<223> B-HH5 construct of a mouse/human modified antigen binding molecule

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tcctgcaagg cttccggata cgcgttcagc tattcttgga tgagctgggt gcggcaggcg 120

cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

aatgggaaat tcaagggcag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 10
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HH5 construct of a mouse/human modified antigen binding molecule

<400> 10

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser
20 25 30

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 11
<211> 357
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<220>
<223> B-HH6 construct of a mouse/human modified antigen binding molecule

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tcctgcaagg cttccggata cgccttcagc tattcttgga tcaattgggt gcggcaggcg 120

cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

aatgggaaat tcaagggcag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

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<210> 12
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HH6 construct of a mouse/human modified antigen binding molecule

<400> 12

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser
20 25 30

Trp Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 13
<211> 357
<212> DNA
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<220>
<223> B-HH7 construct of a mouse/human modified antigen binding molecule

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tcctgcaagg cttccggata cgccttcagc tattcttgga tctcgtgggt gcggcaggcg 120

cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

aatgggaaat tcaagggcag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 14
<211> 357
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HH7 construct of a mouse/human modified antigen binding molecule

<400> 14

Cys Ala Gly Gly Thr Gly Cys Ala Ala Thr Thr Gly Gly Thr Gly Cys
1 5 10 15

Ala Gly Thr Cys Thr Gly Gly Cys Gly Cys Thr Gly Ala Ala Gly Thr
20 25 30

Thr Ala Ala Gly Ala Ala Gly Cys Cys Thr Gly Gly Gly Ala Gly Thr
35 40 45

Thr Cys Ala Gly Thr Gly Ala Ala Gly Gly Thr Cys Thr Cys Cys Thr
50 55 60

Gly Cys Ala Ala Gly Gly Cys Thr Thr Cys Cys Gly Gly Ala Thr Ala
65 70 75 80

Cys Gly Cys Cys Thr Thr Cys Ala Gly Cys Thr Ala Thr Thr Cys Thr
85 90 95

Thr Gly Gly Ala Thr Cys Thr Cys Gly Thr Gly Gly Gly Thr Gly Cys
100 105 110

Gly Gly Cys Ala Gly Gly Cys Gly Cys Cys Thr Gly Gly Ala Cys Ala
115 120 125

Ala Gly Gly Gly Cys Thr Cys Gly Ala Gly Thr Gly Gly Ala Thr Gly
130 135 140

Gly Gly Ala Cys Gly Gly Ala Thr Cys Thr Thr Thr Cys Cys Cys Gly
145 150 155 160

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Gly Cys Gly Ala Thr Gly Gly Gly Gly Ala Thr Ala Cys Thr Gly Ala
                165                 170                 175

Cys Thr Ala Cys Ala Ala Thr Gly Gly Gly Ala Ala Ala Thr Thr Cys
            180                 185                 190

Ala Ala Gly Gly Gly Cys Ala Gly Ala Gly Thr Cys Ala Cys Ala Ala
        195                 200                 205

Thr Thr Ala Cys Cys Gly Cys Cys Gly Ala Cys Ala Ala Ala Thr Cys
    210                 215                 220

Cys Ala Cys Thr Ala Gly Cys Ala Cys Ala Gly Cys Cys Thr Ala Thr
225                 230                 235                 240

Ala Thr Gly Gly Ala Gly Cys Thr Gly Ala Gly Cys Ala Gly Cys Cys
                245                 250                 255

Thr Gly Ala Gly Ala Thr Cys Thr Gly Ala Gly Gly Ala Cys Ala Cys
            260                 265                 270

Gly Gly Cys Cys Gly Thr Gly Thr Ala Thr Thr Ala Cys Thr Gly Thr
        275                 280                 285

Gly Cys Ala Ala Gly Ala Ala Ala Thr Gly Thr Cys Thr Thr Thr Gly
    290                 295                 300

Ala Thr Gly Gly Thr Thr Ala Cys Thr Gly Gly Cys Thr Thr Gly Thr
305                 310                 315                 320

Thr Thr Ala Cys Thr Gly Gly Gly Gly Cys Cys Ala Gly Gly Gly Ala
                325                 330                 335

Ala Cys Cys Cys Thr Gly Gly Thr Cys Ala Cys Cys Gly Thr Cys Thr
            340                 345                 350

Cys Cys Thr Cys Ala
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<210> 15
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HH8 construct of a mouse/human modified antigen binding molecule

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tcctgcaagg cttccggata caccttcaca tacagctgga tgaactgggt gcggcaggcc 120

cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

aatgggaaat tcaagggcag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 16
<211> 119
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<220>
<223> B-HH8 construct of a mouse/human modified antigen binding molecule

<400> 16

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 Ser Gly Tyr Thr Phe Thr Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 17
<211> 357
<212> DNA

<213> Artificial Sequence

<220>
<223> B-HH9 construct of a mouse/human modified antigen binding molecule

<400> 17
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tcctgcaagg cttccggata caccttcagc tattcttgga tgaactgggt gcggcaggcc 120

cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

aatgggaaat tcaagggcag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 18
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HH9 construct of a mouse/human modified antigen binding molecule

<400> 18

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 Ser Gly Tyr Thr Phe Ser Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 19
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL1 construct of a mouse/human modified antigen binding molecule

<400> 19
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tcctgcaagg cttccggata caccttcacc tattcttgga tgcactgggt gcggcaggcc 120

cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

gcacagaaat tccaaggaag agtcacaatg acacgggaca cgtccacttc caccgtctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 20
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL1 construct of a mouse/human modified antigen binding molecule

<400> 20

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 Ser Gly Tyr Thr Phe Thr Tyr Ser
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly

100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 21
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL2 construct of a mouse/human modified antigen binding molecule

<400> 21
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tcctgcaagg tgtccggata caccttcacc tattcttgga tgcactgggt gcagcaggcc 120

cctggaaagg ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

gcagagaaat tccaaggaag agtcacaatc acagccgaca cgtccactga caccgcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 22
<211> 119
<212> PRT
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<220>
<223> B-HL2 construct of a mouse/human modified antigen binding molecule

<400> 22

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

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Tyr Ser
20 25 30

Trp Met His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Ala Glu Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80

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

Ala Thr Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 23
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL3 construct of a mouse/human modified antigen binding molecule

<400> 23
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tcctgcaagg tgtccggata caccttcacc tattcttgga tgaactgggt gcagcaggcc 120

cctggaaagg ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

aatgggaaat tcaagggaag agtcacaatc acagccgaca cgtccactga caccgcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 24
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL3 construct of a mouse/human modified antigen binding molecule

<400> 24

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

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Tyr Ser
20 25 30

Trp Met Asn Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80

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

Ala Thr Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 25
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL4 construct of a mouse/human modified antigen binding molecule

<400> 25
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tcctgcaagg cttccggata caccttcacc tattcttgga tgagctgggt gcggcaggcc 120

cctggacaag ggctcgagtg gatgggacgg atctttcccg gcgatgggga tactgactac 180

gcacagaaat tccaaggaag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctcagct 360

agcacc 366

<210> 26
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL4 construct of a mouse/human modified antigen binding molecule

<400> 26

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1 5 10 15

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

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 27
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL8 construct of a mouse/human modified antigen binding molecule

<400> 27
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tcctgtgcag cctctggatt cacatttagc tattcttgga tgaactgggt gcggcaggct 120

cctggaaagg gcctcgagtg ggtgggacgg atctttcccg gcgatgggga tactgactac 180

aatgggaaat tcaagggcag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 28
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL8 construct of a mouse/human modified antigen binding molecule

<400> 28

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

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

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 29
<211> 456
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL10 construct of a mouse/human modified antigen binding molecule

<400> 29
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cagcagccac aggagcccac tccgaagtgc agctggtgga gtctggagga ggcttggtca 120

agcctggcgg gtccctgcgg ctctcctgtg cagcctctgg attcgcattc agctattctt 180

ggatgaactg ggtgcggcag gctcctggaa agggcctcga gtgggtggga cggatctttc 240

ccggcgatgg ggatactgac tacaatggga aattcaaggg cagagtcaca attaccgccg 300

acaaatccac tagcacagcc tatatggagc tgagcagcct gagatctgag gacacggccg 360

tgtattactg tgcaagaaat gtctttgatg gttactggct tgtttactgg ggccagggaa 420

ccctggtcac cgtctcctca gctagcgaat tctcga 456

<210> 30
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL10 construct of a mouse/human modified antigen binding molecule

<400> 30

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

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ala Phe Ser Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 31
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL11 construct of a mouse/human modified antigen binding molecule

<400> 31
caggtgcagc tggtggagtc tggaggaggc ttggtcaagc ctgggggggtc cctgcgggtc 60

tcctgtgcag cctctggatt cacatttagc tattcttgga tgaactgggt gcggcaggct 120

cctggaaagg gcctcgagtg ggtgggacgg atcttttccg gcgatgggga tactgactac 180

aatgggaaat tcaagggcag agtcacaatt accgccgaca aatccactag cacagcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aagaaatgtc 300

tttgatggtt actggcttgt ttactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 32
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL11 construct of a mouse/human modified antigen binding molecule

<400> 32

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

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

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 33
<211> 456
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL12 construct of a mouse/human modified antigen binding molecule

<400> 33
cggaattcgg cccaccggtg gccaccatgg actggacctg gaggatcctc ttcttggtgg 60

cagcagccac aggagctcac tccgaagtgc agctcgtgga gtctggagca ggcttggtca 120

agcctggcgg gtccctgcgg ctctcctgcg cagcctctgg attcacattt agctattcta 180

ggatgaactg ggtgcggcag gctcctggaa agggcctcga gtgggtggga cggatctttc 240

ccggcgatgg ggatactgac tacaatggga aattcaaggg cagagtcaca attaccgccg 300

acaaatccac tagcacagcc tatatggagc tgagcagcct gagatctgag gacacggccg 360

tgtattactg tgcaagaaat gtctttgatg gttactggct tgtttactgg ggccagggaa 420

cactggtcac cgtctcctca gctagcgaat tctcga 456

<210> 34
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL12 construct of a mouse/human modified antigen binding molecule

<400> 34

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

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

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 35
<211> 456
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL13 construct of a mouse/human modified antigen binding molecule

<400> 35
cggaattcgg cccaccggtg gccaccatgg actggacctg gaggatcctc ttcttggtgg 60

cagcagccac aggagctcac tccgaagtgc agctcgtcga gtctggagga ggcgtggtca 120

agcctggcgg gtccctgcgg ctctcctgcg cagcctctgg attcacattt agctattctt 180

ggatgaactg ggtgcggcag gctcctggaa agggcctcga gtgggtggga cggatctttc 240

ccggcgatgg ggatactgac tacaatggga aattcaaggg cagagtcaca attaccgccg 300

acaaatccac tagcacagcc tatatggagc tgagcagcct gagatctgag gacacggccg 360

tgtattactg tgcaagaaat gtctttgatg gttactggct tgtttactgg ggccagggaa 420

ccctggtcac cgtctcctca gctagcgaat tctcga 456

<210> 36
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL13 construct of a mouse/human modified antigen binding molecule

<400> 36

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

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

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 37
<211> 456
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL14 construct of a mouse/human modified antigen binding molecule

<400> 37
cggaattcgg cccaccggtg gccaccatgg actggacctg gaggatcctc ttcttggtgg 60

cagcagccac aggagctcac tccgaagtgc agctggtcga gtccggagga ggcttgaaga 120

agcctggcgg gtccctgcgg ctctcctgcg cagcctctgg attcacattt agctattctt 180

ggatgaactg ggtgcggcag gctcctggaa agggcctcga gtgggtggga cggatctttc 240

ccggcgatgg ggatactgac tacaatggga aattcaaggg cagagtcaca attaccgccg 300

acaaatccac tagcacagcc tatatggagc tgagcagcct gagatctgag gacacggccg 360

tgtattactg tgcaagaaat gtctttgatg gttactggct tgtttactgg ggccagggaa 420

ccctggtcac cgtctcctca gctagcgaat tctcga 456

<210> 38
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL14 construct of a mouse/human modified antigen binding molecule

<400> 38

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

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

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 39
<211> 456
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL15 construct of a mouse/human modified antigen binding molecule

<400> 39
cggaattcgg cccaccggtg gccaccatgg actggacctg gaggatcctc ttcttggtgg 60

cagcagccac aggagcccac tccgaagtgc agctggtgga gtctggagga ggcttggtca 120

agcctggctc ttccctgcgg ctctcctgcg cagcctctgg attcacattt agctattctt 180

ggatgaactg ggtgcggcag gctcctggaa agggcctcga gtgggtggga cggatctttc 240

ccggcgatgg ggatactgac tacaatggga aattcaaggg cagagtcaca attaccgccg 300

acaaatccac tagcacagcc tatatggagc tgagcagcct gagatctgag gacacggccg 360

tgtattactg tgcaagaaat gtctttgatg gttactggct tgtttactgg ggccagggaa 420

ccctggtcac cgtctcctca gctagcgaat tctcga 456

<210> 40
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL15 construct of a mouse/human modified antigen binding molecule

<400> 40

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

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

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 41
<211> 456
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL16 construct of a mouse/human modified antigen binding molecule

<400> 41
cggaattcgg cccaccggtg gccaccatgg actggacctg gaggatcctc ttcttggtgg 60

cagcagccac aggagcccac tccgaagtgc agctggtgga gtctggagga ggcttggtca 120

agcctggcgg gtccctgcgg gtcagctgcg cagcctctgg attcacattt agctattctt 180

ggatgaactg ggtgcggcag gctcctggaa agggcctcga gtgggtggga cggatctttc 240

ccggcgatgg ggatactgac tacaatggga aattcaaggg cagagtcaca attaccgccg 300

acaaatccac tagcacagcc tatatggagc tgagcagcct gagatctgag gacacggccg 360

tgtattactg tgcaagaaat gtctttgatg gttactggct tgtttactgg ggccagggaa 420

ccctggtcac cgtctcctca gctagcgaat tctcga 456

<210> 42
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL16 construct of a mouse/human modified antigen binding molecule

<400> 42

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

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

20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 43
<211> 456
<212> DNA
<213> Artificial Sequence

<220>
<223> B-HL17 construct of a mouse/human modified antigen binding molecule

<400> 43
cggaattcgg cccaccggtg gccaccatgg actggacctg gaggatcctc ttcttggtgg 60

cagcagccac aggagcccac tccgaagtgc agctggtgga gtctggagga ggcttggtca 120

agcctggcgg gtccctgcgg ctctcctgcg cagcctctgg attcacattt agctattctt 180

ggatgaactg ggtgcggcag gctcctggaa agggcctcga gtgggtggga cggatctttc 240

ccggcgatgg ggatactgac tacaatggga aattcaaggg cagagtcaca attaccgccg 300

acaaatccac tagcacagcc tatatggagc tgagcagcct gagatctgag gacacggccg 360

tgtattactg tgcaagaaat gtctttgatg gttactggct tgtttactgg ggccagggaa 420

ccctggtcac cgtctcctca gctagcgaat tctcga 456

<210> 44
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HL17 construct of a mouse/human modified antigen binding

molecule

<400> 44

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

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

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 45
<211> 57
<212> DNA
<213> Homo sapiens

<400> 45
atggactgga cctggaggat cctcttcttg gtggcagcag ccacaggagc ccactcc 57

<210> 46
<211> 19
<212> PRT
<213> Homo sapiens

<400> 46

Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Gly
1 5 10 15

Ala His Ser

<210> 47

<211> 345
<212> DNA
<213> Artificial Sequence

<220>
<223> B-KV1 of a mouse/human modified antigen binding molecule

<400> 47
gatatcgtga tgacccagac tccactctcc ctgcccgtca cccctggaga gccgccagc 60

attagctgca ggtctagcaa gagcctcttg cacagcaatg gcatcactta tttgtattgg 120

tacctgcaaa agccagggca gtctccacag ctcctgattt atcaaatgtc caaccttgtc 180

tctggcgtcc ctgaccggtt ctccggatcc gggtcaggca ctgatttcac actgaaaatc 240

agcagggtgg aggctgagga tgttggagtt tattactgcg ctcagaatct agaacttcct 300

tacaccttcg gcggagggac caaggtggag atcaaacgta cggtg 345

<210> 48
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> B-KV1 of a mouse/human modified antigen binding molecule

<400> 48

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

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

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

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

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

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

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

Arg Thr

<210> 49
<211> 66
<212> DNA
<213> Homo sapiens

<400> 49
atggacatga gggtccccgc tcagctcctg ggcctcctgc tgctctggtt cccaggtgcc 60

aggtgt 66

<210> 50
<211> 22
<212> PRT
<213> Homo sapiens

<400> 50

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

Phe Pro Gly Ala Arg Cys
20

<210> 51
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<223> I-HHD construct of a mouse/human modified antigen binding molecule

<400> 51
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60

tcctgcaagg cctctggttt cacattcact gactacaaga tacactgggt gcgacaggcc 120

cctggacaag ggctcgagtg gatgggatat ttcaacccta acagcggtta tagtacctac 180

gcacagaagt tccagggcag ggtcaccatt accgcggaca aatccacgag cacagcctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagactatcc 300

ccaggcggtt actatgttat ggatgcctgg ggccaaggga ccaccgtgac cgtctcctca 360

<210> 52
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> I-HHD construct of a mouse/human modified antigen binding molecule

<400> 52

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

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

Lys Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45

Gly Tyr Phe Asn Pro Asn Ser Gly Tyr Ser Thr Tyr Ala Gln Lys Phe
    50                  55                  60

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65                  70                  75                  80

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

Ala Arg Leu Ser Pro Gly Gly Tyr Tyr Val Met Asp Ala Trp Gly Gln
            100                 105                 110

Gly Thr Thr Val Thr Val Ser Ser
        115                 120
```

<210> 53
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<223> M-HHA construct of a mouse/human modified antigen binding molecule

<400> 53
gaagtgcagc tggtggagtc tggaggaggc ttggtcaagc ctggcgggtc cctgcggctc 60

tcctgtgcag cctccggatt cacatttagc aactattgga tgaactgggt gcggcaggct 120

cctggaaagg gcctcgagtg ggtgggagag atcagattga aatccaataa cttcggaaga 180

tattacgctg caagcgtgaa gggccggttc accatcagca gagatgattc caagaacacg 240

ctgtacctgc agatgaacag cctgaagacc gaggatacgg ccgtgtatta ctgtaccaca 300

tacggcaact acgttgggca ctacttcgac cactggggcc aagggaccac cgtcaccgtc 360

tccagc 366

<210> 54
<211> 122
<212> PRT

<213> Artificial Sequence

<220>
<223> M-HHA construct of a mouse/human modified antigen binding molecule

<400> 54

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

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

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Glu Ile Arg Leu Lys Ser Asn Asn Phe Gly Arg Tyr Tyr Ala Ala
50 55 60

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
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 Thr Thr Tyr Gly Asn Tyr Val Gly His Tyr Phe Asp His Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 55
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> IF5-VH - mouse/human chimeric polypeptide

<400> 55

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

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

Asn Met His Trp Val Lys Gln Thr Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

```
Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe
    50                  55                  60

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

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Ser His Tyr Gly Ser Asn Tyr Val Asp Tyr Phe Asp Tyr Trp
            100                 105                 110

Gly Gln Gly Thr Leu Val Thr Val Ser Thr
        115                 120
```

<210> 56
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> B9E9-VH - mouse/human chimeric polypeptide

<400> 56

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

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

Asn Met His Trp Val Lys Gln Thr Pro Gly Gln Gly Leu Glu Trp Ile
        35                  40                  45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe
    50                  55                  60

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

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Ala Gln Leu Arg Pro Asn Tyr Trp Tyr Phe Asp Val Trp Gly
            100                 105                 110

Ala Gly Thr Thr Val Thr Val Ser
        115                 120
```

<210> 57
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> C2B8-VH - mouse/human chimeric polypeptide

<400> 57

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

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

Asn Met His Trp Val Lys Gln Thr Pro Gly Arg Gly Leu Glu Trp Ile
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

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

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Thr Tyr Tyr Gly Gly Asp Trp Tyr Phe Asn Val Trp Gly
100 105 110

Ala Gly Thr Thr Val Thr Val Ser Ala
115 120

<210> 58
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> 2H7-VH - mouse/human chimeric polypeptide

<400> 58

Gln Ala Tyr Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Pro Gly Ala
1 5 10 15

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

```
Asn Met His Trp Val Lys Gln Thr Pro Arg Gln Gly Leu Glu Trp Ile
        35                  40                  45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65                  70                  75                  80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe Cys
                85                  90                  95

Ala Arg Val Val Tyr Tyr Ser Asn Ser Tyr Trp Tyr Phe Asp Val Trp
            100                 105                 110

Gly Thr Gly Thr Thr Val Thr Val Ser
        115                 120
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<210> 59
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-lyl-VH - mouse/human chimeric polypeptide

<400> 59

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

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser
            20                  25                  30

Trp Met Asn Trp Val Lys Leu Arg Pro Gly Gln Gly Leu Glu Trp Ile
        35                  40                  45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
    50                  55                  60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Asn Thr Ala Tyr
65                  70                  75                  80

Met Gln Leu Thr Ser Leu Thr Ser Val Asp Ser Ala Val Tyr Leu Cys
                85                  90                  95

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
            100                 105                 110
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Thr Leu Val Thr Val Ser Ala
115

<210> 60
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> 2F2-VH - mouse/human chimeric polypeptide

<400> 60

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asn Asp Tyr
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Thr Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
50 55 60

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

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Ile Gln Tyr Gly Asn Tyr Tyr Tyr Gly Met Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 61
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> 7D8-VH - mouse/human chimeric polypeptide

<400> 61

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Asp Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe His Asp Tyr
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Thr Ile Ser Trp Asn Ser Gly Thr Ile Gly Tyr Ala Asp Ser Val
50 55 60

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

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Ile Gln Tyr Gly Asn Tyr Tyr Tyr Gly Met Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

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<400> 62

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Ser Leu Arg Leu Ser Cys Thr Gly Ser Gly Phe Thr Phe Ser Tyr His
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ile Ile Gly Thr Gly Gly Val Thr Tyr Tyr Ala Asp Ser Val Lys
50 55 60

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

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

Arg Asp Tyr Tyr Gly Ala Gly Ser Phe Tyr Asp Gly Leu Tyr Gly Met
100 105 110

Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120 125

<210> 63
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<220>
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<400> 63

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<210> 64
<211> 6
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<220>
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<400> 64

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<400> 65

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<210> 66
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<400> 66

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<210> 67
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<400> 67

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<210> 68
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<400> 68

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<210> 69
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<400> 69

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antigen binding molecule

<400> 70

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<210> 71
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<400> 71

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<210> 73
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<400> 73

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<210> 74
<211> 6
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<213> Artificial Sequence

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<400> 74

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<210> 75
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<400> 75

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1 5

<210> 76
<211> 6
<212> PRT
<213> Artificial Sequence

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<400> 76

Gly Ser Gly Leu Val Lys
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<210> 77
<211> 6
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<220>
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<400> 77

Gly Ala Gly Leu Leu Lys
1 5

<210> 78
<211> 6
<212> PRT
<213> Artificial Sequence

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<400> 78

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<210> 79
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<400> 79

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<211> 987
<212> DNA
<213> Homo sapiens

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tcaggcgccc tgaccagcgg cgtgcacacc ttccccggct cctacagtc ctcaggactc 180

tactccctca gcagcgtggt gaccgtgccc tccagcagct tgggcaccca gacctacatc 240

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taccgtgtgg tcagcgtcct caccgtcctg caccaggact ggctgaatgg caaggagtac 600

aagtgcaagg tctccaacaa agccctccca gcccccatcg agaaaaccat ctccaaagcc 660

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aagaaccagg tcagcctgac ctgcctggtc aaaggcttct atcccagcga catcgccgtg 780

gagtgggaga gcaatgggca gccggagaac aactacaaga ccacgcctcc cgtgctggac 840

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<211> 328
<212> PRT
<213> Homo sapiens

<400> 81

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20 25 30

Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
35 40 45

His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
50 55 60

Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile
65 70 75 80

Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Ala
85 90 95

Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
100 105 110

Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
115 120 125

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
130 135 140

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
145 150 155 160

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
165 170 175

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
180 185 190

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
195 200 205

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro

210 215 220

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
225 230 235 240

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
245 250 255

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
260 265 270

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
275 280 285

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
290 295 300

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
305 310 315 320

Ser Leu Ser Leu Ser Pro Gly Lys
325

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<212> DNA
<213> Homo sapiens

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cagggacacg tccatcagca cagcctacat ggagctgagc aggctgagat ctgacgacac 540

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accccaggga ggaggcag 618

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<211> 613
<212> DNA
<213> Homo sapiens

<400> 83
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<211> 546
<212> DNA
<213> Homo sapiens

<400> 84
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gtgggcttca tcttcttatg tcttctccac aggggtcttg tcccaggtca ccttgaagga 180

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cctggagtgg cttgcacaca ttttttcgaa tgacgaaaaa tcctacagca catctctgaa 360

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catggaccct gtggacacag ccacatatta ctgtgcacgg ataccacaga gacacagccc 480

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agaaca 546

<210> 85
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<212> DNA
<213> Homo sapiens

<400> 85

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tcttctccac aggggtctta tcccaggtca ccttgaggga gtctggtcct gcgctggtga 180

aacccacaca gaccctcaca ctgacctgca ccttctctgg gttctcactc agcactagtg 240

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<212> DNA
<213> Homo sapiens

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ccttagccct ggactccaag gcctttccac ttggtgatca gcactgagca cagaggactc 180

accatggaat tggggctgag ctgggttttc cttgttgcta ttttagaagg tgattcatgg 240

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<212> DNA
<213> Homo sapiens

<400> 87
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<212> DNA
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<212> DNA
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<400> 89
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<212> DNA
<213> Homo sapiens

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tcccaggtgt ttccattcgg tgatcagcac tgaacacaga gaacgcacca tggagtttgg 180

actgagctgg gttttccttg ttgctatttt aaaaggtgat tcatggataa atagagatgt 240

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ccgccttgta ttactgtgca aaagatacac agtgagggga agtcagcgag agcccagaca 660

aaaacctcgc tgcaggaaga caggaggggc ctgggctgca gaggccactc aagacacact 720

gagcataggg ttaactctgg gacaagttgc tcaggaaggt taagagctgg tttcctttca 780

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gcaggtgtcc agtgtgaggt gcagctggtg gagtctggag gaggcttgat ccagcctggg 240

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gcgagagaca cagtgagggg aagtcattgt gcgcccagac acaaacctcc ctgcaggaac 540

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ggcaggtgca gatggaggct gatttccttg tcaggatgtg gggacttttg tcttcttctg 660

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<212> DNA
<213> Homo sapiens

<400> 93
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<212> DNA
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aaggggctgg agtggattgg ggaaatctat catagtggga gcaccaacta caacccgtcc 480

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<210> 95
<211> 299
<212> DNA
<213> Homo sapiens

<400> 95
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cagccaccag ggaagggcct ggagtggatt gggtacatct atcatagtgg gagcacctac 180

tacaacccgt ccctcaagag tcgagtcacc atatcagtag acaggtccaa gaaccagttc 240

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<210> 96
<211> 410
<212> DNA
<213> Homo sapiens

<400> 96
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ccctgtccct cacctgcgct gtctatggtg ggtccttcag tggttactac tggagctgga 120

tccgccagcc cccagggaag gggctggagt ggattgggga aatcaatcat agtggaagca 180

ccaactacaa cccgtccctc aagagtcgag tcaccatatc agtagacacg tccaagaacc 240

agttctccct gaagctgagc tctgtgaccg ccgcggacac ggctgtgtat tactgtgcga 300

gaggcacagt gaggggaggt gagtgtgagc ccagacaaaa acctccctgc aggtaggcag 360

agggggcggg cgcaggtact gctcaagacc agcaggtggc gcgcggcgcc 410

<210> 97
<211> 700
<212> DNA
<213> Homo sapiens

<220>
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<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (46)..(46)
<223> n is a, c, g, or t

<400> 97
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actgcccagc tgggatctca gggcttcatt ttctgtcctc caccatcatg gggtcaaccg 180

ccatcctcgc cctcctcctg gctgttctcc aaggtcagtc ctgccgaggg cttgaggtca 240

cagaggagaa cgggtggaaa ggagcccctg attcaaattt tgtgtctccc ccacaggagt 300

ctgttccgag gtgcagctgg tgcagtctgg agcagaggtg aaaaagcccg gggagtctct 360

gaagatctcc tgtaagggtt ctggatacag ctttaccagc tactggatcg gctgggtgcg 420

ccagatgccc gggaaaggcc tggagtggat ggggatcatc tatcctggtg actctgatac 480

cagatacagc ccgtccttcc aaggccaggt caccatctca gccgacaagt ccatcagcac 540

cgcctacctg cagtggagca gcctgaaggc ctcggacacc gccatgtatt actgtgcgag 600

acacacagtg agagaaacca gccccgagcc cgtctaaaac cctccacacc gcaggtgcag 660

aatgagctgc tagagactca ctccccaggg gcctctctat 700

<210> 98
<211> 650
<212> DNA
<213> Homo sapiens

<220>
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<222> (621)..(621)
<223> n is a, c, g, or t

<400> 98
agggcagtca ccagagctcc agacaatgtc tgtctccttc ctcatcttcc tgccccgtgct 60

gggcctccca tggggtcagt gtcagggaga tgccgtattc acagcagcat tcacagactg 120

aggggtgttt cactttgctg tttccttttg tctccaggtg tcctgtcaca ggtacagctg 180

cagcagtcag gtccaggact ggtgaagccc tcgcagaccc tctcactcac ctgtgccatc 240

tccggggaca gtgtctctag caacagtgct gcttggaact ggatcaggca gtccccatcg 300

agaggccttg agtggctggg aaggacatac tacaggtcca agtggtataa tgattatgca 360

gtatctgtga aaagtcgaat aaccatcaac ccagacacat ccaagaacca gttctccctg 420

cagctgaact ctgtgactcc cgaggacacg gctgtgtatt actgtgcaag agacacagtg 480

aggggaagtc agtgtgagcc cagacacaaa cctccctgca gggatgctca ggaccccaga 540

aggcacccag cactaccagc gcagggccca gaccaggagc aggtgtggag ttaagcaaaa 600

atggaacttc ttgctgtgtc ntaaactgtt gttgtttttt ttttttttt 650

<210> 99
<211> 388
<212> DNA
<213> Homo sapiens

<400> 99
taaggggctc cccagtcact gggctgaggg agaaaccagc acagtcaagt gagacttcat 60

gcactcccat ctcctctcca caggtgccca ctcccaggtg cagctggtgc aatctgggtc 120

tgagttgaag aagcctgggg cctcagtgaa ggtttcctgc aaggcttctg gatacacctt 180

cactagctat gctatgaatt gggtgcgaca ggcccctgga caagggcttg agtggatggg 240

atggatcaac accaacactg ggaacccaac gtatgcccag ggcttcacag gacggtttgt 300

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ggacactgcc gtgtattact gtgcgaga 388

<210> 100
<211> 294
<212> DNA
<213> Homo sapiens

<400> 100
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tcctgcaagg cttctggtta cagtttcacc acctatggta tgaattgggt gccacaggcc 120

ccaggacaag ggcttgagtg gatgggatgg ttcaacacct acactgggaa cccaacatat 180

gcccagggct tcacaggacg gtttgtcttc tccatggaca cctctgccag cacagcatac 240

ctgcagatca gcagcctaaa ggctgaggac atggccatgt attactgtgc gaga 294

<210> 101
<211> 6
<212> PRT
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<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 101

Gly Ala Glu Leu Lys Lys
1 5

<210> 102
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 102

Gly Ala Glu Val Val Lys
1 5

<210> 103
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 103

Gly Gly Glu Val Lys Lys

1 5

<210> 104
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 104

Gly Ala Gly Val Lys Lys
1 5

<210> 105
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 105

Gly Gly Gly Val Val Lys
1 5

<210> 106
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 106

Leu Val Thr Val Ser Ser
1 5

<210> 107
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 107

Leu Val Ile Val Ser Ser
1 5

<210> 108
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 108

Leu Val Thr Val Ile Ser
1 5

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

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 109

Leu Val Ile Val Ile Ser
1 5

<210> 110
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 110

Leu Val Gly Val Ser Ser
1 5

<210> 111
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 111

Leu Val Thr Val Gly Ser
1 5

<210> 112
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 112

Leu Val Gly Val Gly Ser
1 5

<210> 113
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 113

Leu Val Ala Val Ser Ser
1 5

<210> 114
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 114

Leu Val Thr Val Ala Ser
1 5

<210> 115
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 115

Leu Val Ala Val Ala Ser
1 5

<210> 116
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 116

Leu Val Val Val Ser Ser
1 5

<210> 117
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 117

Leu Val Thr Val Val Ser
1 5

<210> 118
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 118

Leu Val Val Val Val Ser
1 5

<210> 119
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 119

Leu Val Leu Val Ser Ser
1 5

<210> 120

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

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 120

Leu Val Thr Val Leu Ser
1 5

<210> 121
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 121

Leu Val Leu Val Leu Ser
1 5

<210> 122
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 122

Leu Val Ser Val Ser Ser
1 5

<210> 123
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Vh Sequence at Kabat positions 108-113 of mouse/human modified antigen binding molecule

<400> 123

Leu Val Thr Val Thr Ser
1 5

<210> 124
<211> 119

<212> PRT
<213> Artificial Sequence

<220>
<223> B-HH2A construct of a mouse/human modified antigen binding molecule

<400> 124

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 125
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HH2B construct of a mouse/human modified antigen binding molecule

<400> 125

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 126
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HH2C construct of a mouse/human modified antigen binding molecule

<400> 126

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 127
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HH2D construct of a mouse/human modified antigen binding molecule

<400> 127

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 128
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HH2E construct of a mouse/human modified antigen binding molecule

<400> 128

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Ile Val Ser Ser
115

<210> 129
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> B-HH2F construct of a mouse/human modified antigen binding molecule

<400> 129

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Tyr Ser
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Phe Pro Gly Asp Gly Asp Thr Asp Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Val Phe Asp Gly Tyr Trp Leu Val Tyr Trp Gly Gln Gly
            100                 105                 110

Thr Leu Val Thr Val Ile Ser
        115
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<210> 130
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> B-KV10 construct of a mouse/human modified antigen binding molecule

<400> 130

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

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

Asn Gly Ile Thr Tyr Leu Tyr Trp Tyr Leu Gln Lys Ala Gly Gln Ser
        35                  40                  45

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

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

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

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

Arg Thr Val
        115
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<210> 131
<211> 115
<212> PRT
<213> Artificial Sequence

<220>

<223> B-KV11 construct of a mouse/human modified antigen binding molecule

<400> 131

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

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

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

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

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

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

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

Arg Thr Val
115

<210> 132
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> B-KV12 construct of a mouse/human modified antigen binding molecule

<400> 132

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

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

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

Pro Gln Leu Leu Ile Tyr Gln Met Ser Asn Leu Val Ser Gly Val Pro

50 55 60

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

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

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

Arg Thr Val
115

<210> 133
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> B-KV13 construct of a mouse/human modified antigen binding molecule

<400> 133

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

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

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

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

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

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

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

Arg Thr Val
115

<210> 134
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> B-KV14 construct of a mouse/human modified antigen binding molecule

<400> 134

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

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

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

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

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

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

Leu Glu Leu Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ala Lys
100 105 110

Arg Thr Val
115