

SEQUENCE LISTING

<110> SuppreMol GmbH

<120> Novel anti-FcγRIIB IgG-type antibody

<130> SUPPREMOL

<150> EP13004094.2

<151> 2013-08-16

<160> 14

<170> PatentIn version 3.3

<210> 1

<211> 113

<212> PRT

<213> Rattus norvegicus

<220>

<221> MISC_FEATURE

<222> (1)..(113)

<223> VH r8A6

<400> 1

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

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

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

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

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

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

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

Ser

<210> 2
 <211> 108
 <212> PRT
 <213> Rattus norvegicus

<220>
 <221> MISC_FEATURE
 <223> VL r8A6

<220>
 <221> MISC_FEATURE
 <222> (1)..(108)
 <223> VL r8A6

<400> 2

Asn Ile Val Met Thr Gln Ser Pro Thr Ser Met Phe Ile Ser Val Gly
 1 5 10 15

Asp Arg Val Thr Met Asn Cys Lys Ala Ser Gln Asn Val Gly Thr Tyr
 20 25 30

Val Asp Trp Phe Gln Gln Lys Thr Gly Gln Ser Pro Thr Leu Leu Ile
 35 40 45

Phe Gly Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Ser Ile Ser Asn Met Gln Ala
 65 70 75 80

Glu Asp Leu Ala Val Tyr Tyr Cys Leu Gln Tyr Asn Tyr His Pro Tyr
 85 90 95

Thr Phe Gly Pro Gly Thr Thr Leu Glu Leu Lys Arg
 100 105

<210> 3
 <211> 113
 <212> PRT
 <213> Artificial

<220>
 <223> humanized antibody

<220>
 <221> MISC_FEATURE
 <222> (1)..(113)
 <223> VH hu8A6

<400> 3

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

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

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

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

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

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

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

Ser

<210> 4

<211> 108

<212> PRT

<213> Artificial

<220>

<223> humanized antibody

<220>

<221> MISC_FEATURE

<222> (1)..(108)

<223> VL hu8A6

<400> 4

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Gly Ser Tyr
20 25 30

Val Asp Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Gly Ala Ser Thr Arg Tyr Thr Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Leu Gln Tyr Asn Asn His Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 5
<211> 181
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(181)
<223> human FcyRIIB

<400> 5

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

Gln Trp Ile Asn Val Leu Gln Glu Asp Ser Val Thr Leu Thr Cys Arg
20 25 30

Gly Thr His Ser Pro Glu Ser Asp Ser Ile Gln Trp Phe His Asn Gly
35 40 45

Asn Leu Ile Pro Thr His Thr Gln Pro Ser Tyr Arg Phe Lys Ala Asn
50 55 60

Asn Asn Asp Ser Gly Glu Tyr Thr Cys Gln Thr Gly Gln Thr Ser Leu
65 70 75 80

Ser Asp Pro Val His Leu Thr Val Leu Ser Glu Trp Leu Val Leu Gln
85 90 95

Thr Pro His Leu Glu Phe Gln Glu Gly Glu Thr Ile Val Leu Arg Cys
100 105 110

His Ser Trp Lys Asp Lys Pro Leu Val Lys Val Thr Phe Phe Gln Asn

115 120 125
 Gly Lys Ser Lys Lys Phe Ser Arg Ser Asp Pro Asn Phe Ser Ile Pro
 130 135 140
 Gln Ala Asn His Ser His Ser Gly Asp Tyr His Cys Thr Gly Asn Ile
 145 150 155 160
 Gly Tyr Thr Leu Tyr Ser Ser Lys Pro Val Thr Ile Thr Val Gln Ala
 165 170 175
 Pro Ser Ser Ser Pro
 180

<210> 6
 <211> 329
 <212> PRT
 <213> Artificial
 <220>
 <223> humanized antibody

<220>
 <221> MISC_FEATURE
 <222> (1)..(329)
 <223> CH hu8A6_wt

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

100					105					110					
Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro
		115					120					125			
Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys
		130					135					140			
Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145							150					155			160
Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
				165					170					175	
Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
			180						185					190	
His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn
		195					200					205			
Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
		210					215					220			
Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Glu	Glu
225							230					235			240
Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr
				245					250					255	
Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn
				260					265					270	
Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe
		275						280				285			
Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn
		290					295					300			
Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr
305							310					315			320
Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly							
				325											

<210> 7

<211> 106
 <212> PRT
 <213> Artificial

<220>
 <223> humanized antibody

<220>
 <221> MISC_FEATURE
 <222> (1)..(106)
 <223> CL hu8A6_wt

<400> 7

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
 100 105

<210> 8
 <211> 339
 <212> DNA
 <213> Artificial

<220>
 <223> humanized antibody

<220>
 <221> misc_feature
 <222> (1)..(339)
 <223> VH hu8A6

<400> 8
 caggtgcagc tgggtggagtc tggggggaggc gtggtccagc ctgggaggtc cctgagactc 60

tctctgtgcag cctctggatt caccttcagt gactattaca tggcctgggt ccgccaggct	120
ccaggcaagg ggctggagtg ggtggcatcc atatcatagc atggaagcaa taagtactac	180
ggagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagaccggga	300
gactactggg gccaaaggaac cctgggtcacc gtcagctca	339

<210> 9
 <211> 324
 <212> DNA
 <213> Artificial

<220>
 <223> humanized antibody

<220>
 <221> misc_feature
 <222> (1)..(324)
 <223> VL hu8A6

<400> 9	
cagatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc	60
ctctcctgca gggccagtca gtccgttggc tcctatgtcg actggtacca gcagaaacct	120
ggccaggctc ccaggctcct catctatggg gcatccacca ggtacactgg tatcccagcc	180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct	240
gaagattttg cagtttatta ctgtctgcag tataacaacc atccttacac ttttggccag	300
gggaccaagc tggagatcaa acgt	324

<210> 10
 <211> 990
 <212> DNA
 <213> Artificial

<220>
 <223> humanized antibody

<220>
 <221> misc_feature
 <222> (1)..(990)
 <223> CH hu8A6_wt

<400> 10	
gcctccacca agggcccatc ggtcttcccc ctggcaccct cctccaagag cacctctggg	60
ggcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacggtgtcg	120
tggaactcag ggcacctgac cagcggcgtg cacaccttcc cggctgtcct acagtctctca	180

ggactctact ccctcagcag cgtggtgacc gtgccctcca gcagcttggg caccagacc	240
tacatctgca acgtgaatca caagcccagc aacaccaagg tggacaagaa ggttgagccc	300
aaatcttgtg acaaaaactca cacatgccc cctgtcccag cacctgaact cctgggggga	360
ccgtcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggaccct	420
gaggtcacat gcgtggtggt ggacgtgagc cacgaagacc ctgaggtcaa gttcaactgg	480
tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cgcgggagga gcagtacaac	540
agcacgtacc gtgtggtcag cgtcctcacc gtctgcacc aggactggct gaatggcaag	600
gagtacaagt gcaaggctct caacaaagcc ctcccagccc ccatcgagaa aaccatctcc	660
aaagccaaag ggcagccccg agaaccacag gtgtacaccc tgccccatc ccgggaggag	720
atgaccaaga accaggtcag cctgacctgc ctggtcaaag gcttctatcc cagcgacatc	780
gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac gcctcccgtg	840
ctggactccg acggctcctt ctctctctac agcaagctca ccgtggacaa gagcaggtgg	900
cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacacg	960
cagaagagcc tctccctgtc tccgggttaa	990

<210> 11
 <211> 321
 <212> DNA
 <213> Artificial

<220>
 <223> humanized antibody

<220>
 <221> misc_feature
 <222> (1)..(321)
 <223> CL hu8A6_wt

<400> 11	
acggtggctg caccatcggt cttcatcttc ccgccatctg atgagcagtt gaaatctgga	60
actgcctctg ttgtgtgcct gctgaataac ttctatccca gagaggccaa agtacagtgg	120
aaggtggata acgccctcca atcgggtaac tcccaggaga gtgtcacaga gcaggacagc	180
aaggacagca cctacagcct cagcagcacc ctgacgctga gcaaagcaga ctacgagaaa	240
cacaaagtct acgcctgcga agtcacccat cagggcctga gctcgcccgt cacaaagagc	300
ttcaacaggg gagagtgtta g	321

<210> 12
 <211> 125
 <212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(125)

<223> hu soluble FCyRIIA

<400> 12

Arg Phe Lys Ala Asn Asn Asn Asp Ser Gly Glu Tyr Thr Cys Gln Thr
1 5 10 15

Gly Gln Thr Ser Leu Ser Asp Pro Val His Leu Thr Val Leu Ser Glu
20 25 30

Trp Leu Val Leu Gln Thr Pro His Leu Glu Phe Gln Glu Gly Glu Thr
35 40 45

Ile Met Leu Arg Cys His Ser Trp Lys Asp Lys Pro Leu Val Lys Val
50 55 60

Thr Phe Phe Gln Asn Gly Lys Ser Gln Lys Phe Ser Arg Leu Asp Pro
65 70 75 80

Thr Phe Ser Ile Pro Gln Ala Asn His Ser His Ser Gly Asp Tyr His
85 90 95

Cys Thr Gly Asn Ile Gly Tyr Thr Leu Phe Ser Ser Lys Pro Val Thr
100 105 110

Ile Thr Val Gln Val Pro Ser Met Gly Ser Ser Ser Pro
115 120 125

<210> 13

<211> 179

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(179)

<223> soluble mutated human FCyRIIA

<400> 13

Met Ala Pro Pro Lys Ala Val Leu Lys Leu Glu Pro Pro Trp Ile Asn
1 5 10 15

Val Leu Gln Glu Asp Ser Val Thr Leu Thr Cys Gln Gly Ala Arg Ser

20

25

30

Pro Glu Ser Asp Ser Ile Gln Trp Phe His Asn Gly Asn Leu Ile Pro
 35 40 45

Thr His Thr Gln Pro Ser Tyr Arg Phe Lys Ala Asn Asn Asn Asp Ser
 50 55 60

Gly Glu Tyr Thr Cys Gln Thr Gly Gln Thr Ser Leu Ser Asp Pro Val
 65 70 75 80

His Leu Thr Val Leu Ser Glu Trp Leu Val Leu Gln Thr Pro His Leu
 85 90 95

Glu Phe Gln Glu Gly Glu Thr Ile Met Leu Arg Cys His Ser Trp Lys
 100 105 110

Asp Lys Pro Leu Val Lys Val Thr Phe Phe Gln Asn Gly Lys Ser Lys
 115 120 125

Lys Phe Ser Arg Ser Asp Pro Asn Phe Ser Ile Pro Gln Ala Asn His
 130 135 140

Ser His Ser Gly Asp Tyr His Cys Thr Gly Asn Ile Gly Tyr Thr Leu
 145 150 155 160

Phe Ser Ser Lys Pro Val Thr Ile Thr Val Gln Val Pro Ser Met Gly
 165 170 175

Ser Ser Pro

<210> 14

<211> 329

<212> PRT

<213> artificial

<220>

<223> IgG heavy chain constant region with N to A change at position
 297 when regarding pos. 1 as pos. 118

<400> 14

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

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

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

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

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

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

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

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

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

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

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

Glu Gln Tyr Ala Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190

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

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220

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

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro Gly
 325