SEQUENCE LISTING

<110> Kyowa Hakko Kirin Co., Ltd.

<120> ANTI-ABETA OLIGOMER HUMANIZED ANTIBODY

<130> W500193

<150> US 61/232,038
<151> 2009-08-07

<160> 17

<170> PatentIn version 3.3

<210> 1
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Description of artificial sequence; amino acid sequence of HCDR1

<400> 1

Ser Tyr Trp Met His
1 5

<210> 2
<211> 17
<212> PRT
<213> Artificial

<220>
<223> Description of artificial sequence; amino acid sequence of HCDR2

<400> 2

Glu Ile Asn Pro Arg Asn Gly Gly Thr Asn Asn Asn Glu Asn Phe Lys
1 5 10 15

Arg

<210> 3

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

<220>
<223> Description of artificial sequence; amino acid sequence of HCDR3

<400> 3

Asp Gly Asn Tyr Asp Pro Phe Ala Tyr
1 5

<210> 4
<211> 16
<212> PRT
<213> Artificial

<220>
<223> Description of artificial sequence; amino acid sequence of LCDR1

<400> 4

Arg Ser Ser Gln Ser Leu Val His Ser Asn Gly Asn Thr Tyr Leu His
1 5 10 15

<210> 5
<211> 7
<212> PRT
<213> Artificial

<220>
<223> Description of artificial sequence; amino acid sequence of LCDR2

<400> 5

Lys Val Ser Asn Arg Phe Ser
1 5

<210> 6
<211> 10
<212> PRT
<213> Artificial

<220>
<223> Description of artificial sequence; amino acid sequence of LCDR3

<400> 6

Ser Gln Ser Thr His Val Pro Pro Tyr Thr
1 5 10

<210> 7
<211> 354
<212> DNA
<213> Mus musculus

<220>
<221> CDS
<222> (1)..(354)

<400> 7

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cag gtc caa ctc cag cag cct ggg gct gaa ctg gtg aag cct ggg gct      48
Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys Pro Gly Ala
1               5                  10                  15

tca gtg aag ttg tcc tgc aag gct tct ggc tac acc ttc acc agc tac      96
Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30

tgg atg cac tgg gtg aag ctg agg cct gga caa ggc ttt gag tgg att     144
Trp Met His Trp Val Lys Leu Arg Pro Gly Gln Gly Phe Glu Trp Ile
        35                  40                  45

gga gag att aat cct aga aat ggt ggt act aac aac aat gag aac ttc     192
Gly Glu Ile Asn Pro Arg Asn Gly Gly Thr Asn Asn Asn Glu Asn Phe
    50                  55                  60

aag aga aag gcc aca ctg act gta gac aaa tcc tcc agc aca gcc tac     240
Lys Arg Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65                  70                  75                  80

atg caa ctc agc agc ctg aca tct gag gac tct gcg gtc tat tac tgt     288
Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85                  90                  95

aca aga gat ggt aac tac gac ccc ttt gct tac tgg ggc caa ggg act     336
Thr Arg Asp Gly Asn Tyr Asp Pro Phe Ala Tyr Trp Gly Gln Gly Thr
            100                 105                 110

ctg gtc act gtc tct gca                                             354
Leu Val Thr Val Ser Ala
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115

<210> 8
<211> 118
<212> PRT
<213> Mus musculus

<400> 8

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

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

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

Gly Glu Ile Asn Pro Arg Asn Gly Gly Thr Asn Asn Asn Glu Asn Phe
50 55 60

Lys Arg 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 Tyr Cys
85 90 95

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

Leu Val Thr Val Ser Ala
115

<210> 9
<211> 339
<212> DNA
<213> Mus musculus

<220>
<221> CDS
<222> (1)..(339)

<400> 9
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Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1 5 10 15

gat caa gcc tcc atc tct tgc aga tct agt cag agc ctt gta cac agt 96
Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
20 25 30

aat gga aac acc tat tta cat tgg tac ctg cag aag cca ggc cag tct 144
Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

cca aag ctc ctg atc tac aaa gtt tcc aac cga ttt tct ggg gtc cca 192
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

gac agg ttc agt ggc agt gga tca ggg aca gat ttc aca ctc aag atc 240
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

agc aga gtg gag gct gag gat ctg gga gtt tat ttc tgc tct caa agt 288
Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser Gln Ser
85 90 95

aca cat gtt cct ccg tac acg ttc gga ggg ggg acc aag ctg gaa ata 336
Thr His Val Pro Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
100 105 110

aaa 339
Lys

<210> 10
<211> 113
<212> PRT
<213> Mus musculus

<400> 10

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

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
20 25 30

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

Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe 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 Leu Gly Val Tyr Phe Cys Ser Gln Ser
85 90 95

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

Lys

<210> 11
<211> 354
<212> DNA
<213> Artificial

<220>
<223> Description of artificial sequence; a DNA sequence of 6E4HV0 variable region

<400> 11
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cctggtcaag gcttggagtg gatgggtgag attaatcctc gaaatggtgg tactaacaac 180

aatgagaact tcaagcgacg ggtcacaatc actgcagaca catccaccag cacagcctac 240

atggaactca gcagcctgcg atctgaggac actgcggtct attactgtgc acgagatggt 300

aactacgacc catttgctta ctggggccaa gggactctgg tcactgtctc ttca 354

<210> 12
<211> 118
<212> PRT
<213> artificial

<220>
<223> an amino acid sequence of 6E4HV0 variable region

<400> 12

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 Ser Tyr
20 25 30

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

Gly Glu Ile Asn Pro Arg Asn Gly Gly Thr Asn Asn Asn Glu Asn Phe
50 55 60

Lys Arg Arg Val Thr Ile Thr Ala Asp Thr 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 Asp Gly Asn Tyr Asp Pro Phe Ala Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 13
<211> 339

<212> DNA
<213> Artificial

<220>
<223> Description of artificial sequence; a DNA sequence of 6E4LV0 variable region

<400> 13
gatattgtga tgacccaatc tccactctcc ctgcctgtca ctcctggtga gccagcctcc 60

atctcttgcc gatctagtca gagccttgta cacagtaatg gcaacaccta tttacattgg 120

tacctgcaga agccaggcca gtctccacag ctcctgatct acaaagtttc caaccgattt 180

tctggggtcc cagaccggtt cagtggcagt gggtcaggga cagatttcac actcaagatc 240

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ccgtacacgt tcggtcaggg gaccaagctg gaaatcaaa 339

<210> 14
<211> 113
<212> PRT
<213> artificial

<220>
<223> an amino acid sequence of 6E4LV0 variable region

<400> 14

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

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

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

Pro Gln Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe 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 Ser Gln Ser
85 90 95

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

Lys

<210> 15
<211> 118
<212> PRT
<213> artificial

<220>
<223> an amino acid sequence of HV12 variable region

<400> 15

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

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

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

Gly Glu Ile Asn Pro Arg Asn Gly Gly Thr Asn Asn Asn Glu Asn Phe
50 55 60

Lys Arg Lys Ala Thr Leu Thr Val 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

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

Leu Val Thr Val Ser Ser
115

<210> 16
<211> 113
<212> PRT
<213> artificial

<220>
<223> an amino acid sequence of LV2a variable region

<400> 16

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

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

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

Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe 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 Phe Cys Ser Gln Ser
85 90 95

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

Lys

<210> 17
<211> 113
<212> PRT
<213> artificial

<220>
<223> an amino acid sequence of LV4 variable region

<400> 17

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1 5 10 15

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

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

Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe 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 Phe Cys Ser Gln Ser
85 90 95

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

Lys