

14801132_ASFILED_SequenceListing-Text
SEQUENCE LISTING

<110> Spirogen Sarl
Genentech, Inc.

<120> Pyrrolobenzodiazepines and Conjugates Thereof

<130> 065435-9218-W000

<140> PCT/US2014/025564

<141> 2014-03-13

<150> US 61/778,771

<151> 2013-03-13

<160> 54

<170> PatentIn version 3.3

<210> 1

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<213> Artificial sequence

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<223> Synthetic sequence: Antibody drug conjugate CDR L1

<400> 1

Arg Ser Ser Glu Thr Leu Val His Ser Ser Gly Asn Thr Tyr Leu Glu
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<400> 2

Arg Val Ser Asn Arg Phe Ser
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<210> 3

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<223> Synthetic sequence: Antibody drug conjugate CDR L3

<400> 3

Phe Gln Gly Ser Phe Asn Pro Leu Thr
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<211> 10

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<223> Synthetic sequence: Antibody drug conjugate CDR H1

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<400> 4

Gly Phe Ser Phe Ser Asp Phe Ala Met Ser
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<223> Synthetic sequence: Antibody drug conjugate CDR H2

<400> 5

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

Lys Gly

<210> 6

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<223> Synthetic sequence: Antibody drug conjugate CDR H3

<400> 6

Ala Arg His Arg Gly Phe Asp Val Gly His Phe Asp Phe
1 5 10

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<211> 113

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<223> Synthetic sequence: Antibody drug conjugate VL

<400> 7

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 Glu Thr Leu Val His Ser
20 25 30

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

Pro Lys Leu Leu Ile Tyr Arg Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

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

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Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Phe Gln Gly
85 90 95

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

Arg

<210> 8
<211> 120
<212> PRT
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<223> Synthetic sequence: Antibody drug conjugate VH

<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 Ser Phe Ser Asp Phe
20 25 30

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

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

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 9
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<223> Synthetic sequence: Antibody drug conjugate light chain

<400> 9

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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14801132_ASFILED_SequenceListing-Text

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

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

Pro Lys Leu Leu Ile Tyr Arg Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

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

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Phe Gln Gly
85 90 95

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

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165 170 175

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
180 185 190

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 10

<211> 450

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic sequence: Antibody drug conjugate heavy chain

<400> 10

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

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

Gly Thr Leu Val Thr Val Ser Ser Cys Ser Thr Lys Gly Pro Ser Val
115 120 125

Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
130 135 140

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
145 150 155 160

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
165 170 175

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
180 185 190

Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
195 200 205

Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp
210 215 220

Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly
225 230 235 240

Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
245 250 255

Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
260 265 270

Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
275 280 285

Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg

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290

295

300

Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
305 310 315 320

Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu
325 330 335

Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
340 345 350

Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu
355 360 365

Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
370 375 380

Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
385 390 395 400

Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
405 410 415

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
420 425 430

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
435 440 445

Gly Lys
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<210> 11
<211> 16
<212> PRT
<213> Artificial sequence

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<223> Synthetic sequence: Antibody drug conjugate light chain
hypervariable region HVR-L1

<400> 11

Arg Ser Ser Gln Ser Ile Val His Ser Val Gly Asn Thr Phe Leu Glu
1 5 10 15

<210> 12
<211> 7
<212> PRT
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<220>
<223> Synthetic sequence: Antibody drug conjugate light chain
hypervariable region HVR-L2

<400> 12

14801132_ASFILED_SequenceListing-Text

Lys Val Ser Asn Arg Phe Ser
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<210> 13
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<212> PRT
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<220>
<223> Synthetic sequence: Antibody drug conjugate light chain
hypervariable region HVR-L3

<400> 13

Phe Gln Gly Ser Gln Phe Pro Tyr Thr
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<210> 14
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<212> PRT
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<220>
<223> Synthetic sequence: Antibody drug conjugate heavy chain
hypervariable region HVR-H1

<400> 14

Gly Tyr Glu Phe Ser Arg Ser Trp Met Asn
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<210> 15
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<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic sequence: Antibody drug conjugate heavy chain
hypervariable region HVR-H2

<400> 15

Gly Arg Ile Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Ser Gly Lys Phe
1 5 10 15

Lys Gly

<210> 16
<211> 11
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic sequence: Antibody drug conjugate heavy chain
hypervariable region HVR-H3

<400> 16

Asp Gly Ser Ser Trp Asp Trp Tyr Phe Asp Val
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14801132_ASFILED_SequenceListing-Text

<210> 17
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 <400> 17

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

<210> 18
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 <212> PRT
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<220>
 <223> Synthetic sequence: Anti-CD33 antibody HVR-L2
 <400> 18

Leu Gly Val Asn Ser Val Ser
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<210> 19
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 <212> PRT
 <213> Artificial sequence

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 <223> Synthetic sequence: Anti-CD33 antibody HVR-L3
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Met Gln Ala Leu Gln Thr Pro Trp Thr
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<210> 20
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 <223> Synthetic sequence: Anti-CD33 antibody HVR-H1
 <400> 20

Asn His Ala Ile Ser
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<210> 21
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 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic sequence: Anti-CD33 antibody HVR-H2
 <400> 21

Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln
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1

5

10

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Gly

<210> 22

<211> 7

<212> PRT

<213> Artificial sequence

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<223> Synthetic sequence: Anti-CD33 antibody HVR-H3

<400> 22

Glu Trp Ala Asp Val Phe Asp

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<210> 23

<211> 112

<212> PRT

<213> Artificial sequence

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<223> Synthetic sequence: Anti-CD33 antibody VL

<400> 23

Glu Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly

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10

15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser

20

25

30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser

35

40

45

Pro Gln Leu Leu Ile Tyr Leu Gly Val Asn Ser 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

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Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala

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Leu Gln Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

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<210> 24

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<223> Synthetic sequence: Anti-CD33 antibody VH

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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 Gly Ile Phe Ser Asn His
20 25 30

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Phe
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 Glu Trp Ala Asp Val Phe Asp Ile Trp Gly Gln Gly Thr Met
100 105 110

Val Thr Val Ser Ser
115

<210> 25
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<223> Synthetic sequence: Anti-CD33 antibody HVR-L1
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Arg Ala Ser Gln Gly Ile Arg Asn Asp Leu Gly
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<210> 26
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<223> Synthetic sequence: Anti-CD33 antibody HVR-L2
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Ala Ala Ser Ser Leu Gln Ser
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<223> Synthetic sequence: Anti-CD33 antibody HVR-L3

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Leu Gln His Asn Ser Tyr Pro Trp Thr
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<223> Synthetic sequence: Anti-CD33 antibody HVR-H1

<400> 28

Gly Asn Tyr Met Ser
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<210> 29

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<223> Synthetic sequence: Anti-CD33 antibody HVR-H2

<400> 29

Leu Ile Tyr Ser Gly Asp Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly
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<223> Synthetic sequence: Anti-CD33 antibody HVR-H3

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Asp Gly Tyr Tyr Val Ser Asp Met Val Val
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<213> Artificial sequence

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<223> Synthetic sequence: Anti-CD33 antibody VL

<400> 31

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
20 25 30

Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile

14801132_ASFILED_SequenceListing-Text

35

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45

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

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

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
85 90 95

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

<210> 32

<211> 118

<212> PRT

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<223> Synthetic sequence: Anti-CD33 antibody VH

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

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

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

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

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

Arg Asp Gly Tyr Tyr Val Ser Asp Met Val Val Trp Gly Lys Gly Thr
100 105 110

Thr Val Thr Val Ser Ser
115

<210> 33

<211> 107

<212> PRT

<213> Artificial sequence

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<223> Synthetic sequence: Anti-CD33 antibody VL

14801132_ASFILED_SequenceListing-Text

<400> 33

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

<210> 34

<211> 118

<212> PRT

<213> Artificial sequence

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<223> Synthetic sequence: Anti-CD33 antibody VH

<400> 34

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

14801132_ASFILED_SequenceListing-Text

Thr Val Thr Val Ser Ser
115

<210> 35
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<212> PRT
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<400> 35

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 Ala Ser Gln Gly Ile Arg Asn Asp
20 25 30

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

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

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

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
85 90 95

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

<210> 36
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<212> PRT
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<400> 36

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

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

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

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

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

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

Arg Asp Gly Tyr Tyr Val Ser Asp Met Val Val Trp Gly Lys Gly Thr
100 105 110

Thr Val Thr Val Ser Ser
115

<210> 37
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<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic sequence: Anti-CD33 antibody VL

<400> 37

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 Ala Ser Gln Gly Ile Arg Asn Asp
20 25 30

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

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

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

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp
85 90 95

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

<210> 38
<211> 118
<212> PRT
<213> Artificial sequence

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<223> Synthetic sequence: Anti-CD33 antibody VH

<400> 38

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

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

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

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

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

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

Arg Asp Gly Tyr Tyr Val Ser Asp Met Val Val Trp Gly Lys Gly Thr
100 105 110

Thr Val Thr Val Ser Ser
115

<210> 39
<211> 112
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic sequence: Anti-LGR5 antibody VL
<400> 39

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

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr
20 25 30

Gly Asn Ser Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

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

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

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

Glu Asp Pro Phe Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
100 105 110

<210> 40

14801132_ASFILED_SequenceListing-Text

<211> 118
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic sequence: Anti-LGR5 antibody VH

<400> 40

Glu 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 Ala Tyr
 20 25 30
 Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Glu Ile Leu Pro Gly Ser Asp Ser Thr Asp Tyr Asn Glu Lys Phe
 50 55 60
 Lys Val Arg Ala Thr Phe Thr Ser Asp Thr Ser Thr Ser Thr Val Tyr
 65 70 75 80
 Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Gly His Tyr Gly Ser Leu Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Leu Val Thr Val Ser Ser
 115

<210> 41
 <211> 108
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic sequence: Anti-LGR5 antibody VL

<400> 41

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 Ala Ser Gln Asp Val Ser Thr Ala
 20 25 30
 Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ser Ala Ser Phe Leu Tyr Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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65

70

75

80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Thr Thr Pro Pro
 85 90 95

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

<210> 42

<211> 116

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic sequence: Anti-LGR5 antibody VH

<400> 42

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 Thr Ser Tyr
 20 25 30

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

Ala Glu Ile Tyr Pro Pro Gly Gly Tyr Thr Asp Tyr Ala Asp Ser Val
 50 55 60

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

Thr Val Ser Ser
 115

<210> 43

<211> 15

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic sequence: Anti-LGR5 antibody HVR-L1

<400> 43

Arg Ala Ser Glu Ser Val Asp Asn Tyr Gly Asn Ser Phe Met His
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<210> 44

14801132_ASFILED_SequenceListing-Text

<211> 7

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic sequence: Anti-LGR5 antibody HVR-L2

<400> 44

Leu Ala Ser Asn Leu Glu Ser
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<210> 45

<211> 9

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic sequence: Anti-LGR5 antibody HVR-L3

<400> 45

Gln Gln Asn Tyr Glu Asp Pro Phe Thr
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<210> 46

<211> 10

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic sequence: Anti-LGR5 antibody HVR-H1

<400> 46

Gly Tyr Thr Phe Ser Ala Tyr Trp Ile Glu
1 5 10

<210> 47

<211> 17

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic sequence: Anti-LGR5 antibody HVR-H2

<400> 47

Glu Ile Leu Pro Gly Ser Asp Ser Thr Asp Tyr Asn Glu Lys Phe Lys
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Val

<210> 48

<211> 9

<212> PRT

<213> Artificial sequence

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<223> Synthetic sequence: Anti-LGR5 antibody HVR-H3

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14801132_ASFILED_SequenceListing-Text

Gly Gly His Tyr Gly Ser Leu Asp Tyr
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Arg Ala Ser Gln Asp Val Ser Thr Ala Val Ala
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<210> 50
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Gly

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Ala Arg Leu Phe Phe Asp Tyr
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