SEQUENCE LISTING

<110> BioNTech Cell & Gene Therapies GmbH

<120> CHIMERIC ANTIGEN RECEPTOR-MODIFIED CELLS FOR THE TREATMENT OF CLDN6 EXPRESSING CANCER

<130> 674-260 PCT2

<150> PCT/EP2019/053156
<151> 2019-02-08

<160> 40

<170> PatentIn version 3.5

<210> 1
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<212> PRT
<213> Homo sapiens

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Met Ala Ser Ala Gly Met Gln Ile Leu Gly Val Val Leu Thr Leu Leu
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Gly Trp Val Asn Gly Leu Val Ser Cys Ala Leu Pro Met Trp Lys Val
20 25 30

Thr Ala Phe Ile Gly Asn Ser Ile Val Val Ala Gln Val Val Trp Glu
35 40 45

Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr Gly Gln Met Gln Cys
50 55 60

Lys Val Tyr Asp Ser Leu Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala
65 70 75 80

Arg Ala Leu Cys Val Ile Ala Leu Leu Val Ala Leu Phe Gly Leu Leu
85 90 95

Val Tyr Leu Ala Gly Ala Lys Cys Thr Thr Cys Val Glu Glu Lys Asp
100 105 110

Ser Lys Ala Arg Leu Val Leu Thr Ser Gly Ile Val Phe Val Ile Ser
115 120 125

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Gly Val Leu Thr Leu Ile Pro Val Cys Trp Thr Ala His Ala Ile Ile
    130                 135                 140

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

Gly Ala Ser Leu Tyr Leu Gly Trp Ala Ala Ser Gly Leu Leu Leu Leu
                165                 170                 175

Gly Gly Gly Leu Leu Cys Cys Thr Cys Pro Ser Gly Gly Ser Gln Gly
            180                 185                 190

Pro Ser His Tyr Met Ala Arg Tyr Ser Thr Ser Ala Pro Ala Ile Ser
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Arg Gly Pro Ser Glu Tyr Pro Thr Lys Asn Tyr Val
    210                 215                 220
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<223> human claudin 6 I143V polymorphism

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Gly Trp Val Asn Gly Leu Val Ser Cys Ala Leu Pro Met Trp Lys Val
            20                  25                  30

Thr Ala Phe Ile Gly Asn Ser Ile Val Val Ala Gln Val Val Trp Glu
        35                  40                  45

Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr Gly Gln Met Gln Cys
    50                  55                  60
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Lys Val Tyr Asp Ser Leu Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala
65                  70                  75                  80

Arg Ala Leu Cys Val Ile Ala Leu Leu Val Ala Leu Phe Gly Leu Leu
                85                  90                  95

Val Tyr Leu Ala Gly Ala Lys Cys Thr Thr Cys Val Glu Glu Lys Asp
            100                 105                 110

Ser Lys Ala Arg Leu Val Leu Thr Ser Gly Ile Val Phe Val Ile Ser
        115                 120                 125

Gly Val Leu Thr Leu Ile Pro Val Cys Trp Thr Ala His Ala Val Ile
    130                 135                 140

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

Gly Ala Ser Leu Tyr Leu Gly Trp Ala Ala Ser Gly Leu Leu Leu Leu
                165                 170                 175

Gly Gly Gly Leu Leu Cys Cys Thr Cys Pro Ser Gly Gly Ser Gln Gly
            180                 185                 190

Pro Ser His Tyr Met Ala Arg Tyr Ser Thr Ser Ala Pro Ala Ile Ser
        195                 200                 205

Arg Gly Pro Ser Glu Tyr Pro Thr Lys Asn Tyr Val
    210                 215                 220
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<210> 3
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<400> 3

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Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1               5                   10                  15
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Ser Met Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr
20 25 30

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

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

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

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

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

Leu Thr Val Ser Ser
115

<210> 4
<211> 106
<212> PRT
<213> Artificial Sequence

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<223> Antibody VL sequence

<400> 4

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

Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Leu His
20 25 30

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

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

Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu Asp
65 70 75 80

Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Ile Tyr Pro Pro Trp Thr
85 90 95

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

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

<220>
<223> Antibody VH sequence

<400> 5

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

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

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

Gly Leu Ile Asn Pro Tyr Asn Gly Gly Thr Ile 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 Glu Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

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

Leu Thr Val Ser Ser
115

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

<220>
<223> Antibody VL sequence

<400> 6

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

Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met His
20 25 30

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

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

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

Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Asn Tyr Pro Pro Trp Thr
85 90 95

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

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

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

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

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

Gly Leu Ile Asn Pro Tyr Asn Gly Gly Ile Ile 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 Glu Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val Phe Tyr Cys
                85                  90                  95

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

Leu Thr Val Ser Ser
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<210> 8
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<213> Artificial Sequence

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<223> Antibody VL sequence

<400> 8

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

Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met His
            20                  25                  30

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

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

Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Val Ala Ala Glu Asp
65                  70                  75                  80
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Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Thr Tyr Pro Pro Trp Thr
85 90 95

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

<210> 9
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<212> PRT
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<223> Antibody VH sequence

<400> 9

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

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

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

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

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

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

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

Leu Thr Val Ser Ser
115

<210> 10
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<212> PRT
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<400> 10

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

Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Asn Tyr Met His
20 25 30

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

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

Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu Asp
65 70 75 80

Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Asn Asn Tyr Pro Pro Trp Thr
85 90 95

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

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<223> Any amino acid, preferably an aromatic amino acid, more preferably Phe or Tyr, most preferably Tyr

<220>
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<222> (5)..(5)
<223> Any amino acid, preferably Leu or Phe, more preferably Leu

<400> 11

Xaa Gly Xaa Val Xaa
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<210> 12
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<213> Artificial Sequence

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<223> Any amino acid, preferably an aromatic amino acid, more preferably Phe or Tyr, most preferably Tyr

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<222> (4)..(4)
<223> Any amino acid, preferably an aromatic amino acid, more preferably Phe or Tyr, most preferably Tyr

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Any amino acid, preferably Leu or Phe, more preferably Leu

<400> 12

Asp Xaa Gly Xaa Val Xaa
1 5

<210> 13
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<223> Antibody VH CDR3 sequence

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<223> Any amino acid, preferably an aromatic amino acid, more preferably Phe or Tyr, most preferably Tyr

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<223> Any amino acid, preferably an aromatic amino acid, more preferably Phe or Tyr, most preferably Tyr

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<222> (5)..(5)
<223> Any amino acid, preferably Leu or Phe, more preferably Leu

<400> 13

Xaa Gly Xaa Val Xaa Asp
1 5

<210> 14
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<223> Any amino acid, preferably Leu or Phe, more preferably Leu

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Asp Xaa Gly Xaa Val Xaa Asp
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<223> Any amino acid, preferably an aromatic amino acid, more preferably Phe or Tyr, most preferably Tyr

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<223> Any amino acid, preferably an aromatic amino acid, more preferably Phe or Tyr, most preferably Tyr

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<223> Any amino acid, preferably Leu or Phe, more preferably Leu

<400> 15

Ala Arg Asp Xaa Gly Xaa Val Xaa Asp Tyr
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<400> 16

Gly Tyr Ser Phe Thr Gly Tyr Thr
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Ile Asn Pro Tyr Asn Gly Gly Xaa
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<210> 18
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<223> Any amino acid, preferably Ser or Asn, most preferably Ser

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<223> Any amino acid, preferably Tyr, Ser, Ile, Asn or Thr, more preferably Tyr, Ser, or Asn, most preferably Asn

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Any amino acid, preferably Ser or Tyr, more preferably Tyr

<400> 18

Arg Xaa Xaa Xaa Pro
1 5

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<223> Any amino acid, preferably Ser or Asn, most preferably Ser

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<223> Any amino acid, preferably Tyr, Ser, Ile, Asn or Thr, more preferably Tyr, Ser, or Asn, most preferably Asn

<220>
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<222> (5)..(5)
<223> Any amino acid, preferably Ser or Tyr, more preferably Tyr

<400> 19

Gln Arg Xaa Xaa Xaa Pro Pro
1 5

<210> 20
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<223> Any amino acid, preferably Ser or Asn, most preferably Ser

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<221> MISC_FEATURE
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<223> Any amino acid, preferably Tyr, Ser, Ile, Asn or Thr, more preferably Tyr, Ser, or Asn, most preferably Asn

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Any amino acid, preferably Ser or Tyr, more preferably Tyr

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Gln Gln Arg Xaa Xaa Xaa Pro Pro Trp Thr
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<210> 21

<211> 5
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<213> Artificial Sequence

<220>
<223> Antibody VL CDR1 sequence

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Any amino acid, preferably Ser or Asn, most preferably Ser

<400> 21

Ser Ser Val Xaa Tyr
1 5

<210> 22
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<400> 22

Ser Thr Ser
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<210> 23
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Ile Val Leu Thr Gln Ser Pro Ser Ile Met Ser Val Ser Pro Gly Glu
1 5 10 15

Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met His
20 25 30

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

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

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

Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Asn Tyr Pro Pro Trp Thr
85 90 95

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

<210> 24
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<400> 24

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

Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met His
20 25 30

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

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

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

Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Asn Tyr Pro Pro Trp Thr
85 90 95

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

<210> 25
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<400> 25

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

Ala His Ser

<210> 26
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<223> GS-Linker

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Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
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<210> 27
<211> 47
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<213> Artificial Sequence

<220>
<223> Human CD8 hinge domain

<400> 27

Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala
1 5 10 15

Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly
20 25 30

Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr
35 40 45

<210> 28
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Human CD8 transmembrane domain

<400> 28

Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu
1 5 10 15

Val Ile Thr Leu Tyr Cys
20

<210> 29
<211> 69
<212> PRT
<213> Artificial Sequence

<220>
<223> Human CD8 hinge and transmembrane domain

<400> 29

Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala
1 5 10 15

Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly
20 25 30

Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile
35 40 45

Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val
50 55 60

Ile Thr Leu Tyr Cys
65

<210> 30
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<220>
<223> Human 4-1BB signalling domain

<400> 30

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
1 5 10 15

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
20 25 30

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu
35 40

<210> 31
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<213> Artificial Sequence

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<223> Human CD3zeta signalling domain

<400> 31

Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

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

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<223> human IgG1 hinge-Ch2-CD3 Fc domain

<400> 32

Glu Pro Lys Ser Pro Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1 5 10 15

Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
20 25 30

Asp Thr Leu Met Ile Ala Arg Thr Pro Glu Val Thr Cys Val Val Val
35 40 45

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
50 55 60

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
65 70 75 80

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
85 90 95

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
100 105 110

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
115 120 125

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys
130 135 140

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

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
165 170 175

```
Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
            180                 185                 190


Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
        195                 200                 205


Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
    210                 215                 220


Leu Ser Leu Ser Pro Gly Lys Lys Asp Pro Lys
225                 230                 235


<210>  33
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<213>  Artificial Sequence

<220>
<223>  human CD28 transmembrane and signalling domain

<400>  33

Phe Trp Val Leu Val Val Val Gly Gly Val Leu Ala Cys Tyr Ser Leu
1               5                   10                  15


Leu Val Thr Val Ala Phe Ile Ile Phe Trp Val Arg Ser Lys Arg Ser
            20                  25                  30


Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr Pro Arg Arg Pro Gly
        35                  40                  45


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


Ala Tyr Arg Ser
65


<210>  34
<211>  27
<212>  PRT
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<220>
<223>  human CD28 transmembrane domain
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<400> 34

Phe Trp Val Leu Val Val Val Gly Gly Val Leu Ala Cys Tyr Ser Leu
1 5 10 15

Leu Val Thr Val Ala Phe Ile Ile Phe Trp Val
20 25

<210> 35
<211> 244
<212> PRT
<213> Artificial Sequence

<220>
<223> anti-CLDN6 scFv

<400> 35

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

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

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

Gly Leu Ile Asn Pro Tyr Asn Gly Gly Thr Ile 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 Glu Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

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

Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Ser Ile Met Ser

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    130                 135                 140

Val Ser Pro Gly Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser
145                 150                 155                 160

Val Ser Tyr Met His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys
                165                 170                 175

Leu Ser Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg
            180                 185                 190

Phe Ser Gly Arg Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg
        195                 200                 205

Val Ala Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Asn
    210                 215                 220

Tyr Pro Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
225                 230                 235                 240

Ser Asp Pro Ala
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<210> 36
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<223> CLDN6-CAR

<400> 36

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

Ala His Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys
            20                  25                  30

Pro Gly Ala Ser Met Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe
        35                  40                  45

Thr Gly Tyr Thr Met Asn Trp Val Lys Gln Ser His Gly Lys Asn Leu
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    50                  55                  60

Glu Trp Ile Gly Leu Ile Asn Pro Tyr Asn Gly Gly Thr Ile Tyr Asn
65                  70                  75                  80

Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser
                85                  90                  95

Thr Ala Tyr Met Glu Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val
            100                 105                 110

Tyr Tyr Cys Ala Arg Asp Tyr Gly Phe Val Leu Asp Tyr Trp Gly Gln
        115                 120                 125

Gly Thr Thr Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
    130                 135                 140

Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Ser
145                 150                 155                 160

Ile Met Ser Val Ser Pro Gly Glu Lys Val Thr Ile Thr Cys Ser Ala
                165                 170                 175

Ser Ser Ser Val Ser Tyr Met His Trp Phe Gln Gln Lys Pro Gly Thr
            180                 185                 190

Ser Pro Lys Leu Ser Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val
        195                 200                 205

Pro Ala Arg Phe Ser Gly Arg Gly Ser Gly Thr Ser Tyr Ser Leu Thr
    210                 215                 220

Ile Ser Arg Val Ala Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln
225                 230                 235                 240

Arg Ser Asn Tyr Pro Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu
                245                 250                 255

Ile Lys Arg Ser Asp Pro Ala Thr Thr Thr Pro Ala Pro Arg Pro Pro
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Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
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Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
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Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305                 310                 315                 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
                325                 330                 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
            340                 345                 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
        355                 360                 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
    370                 375                 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385                 390                 395                 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
                405                 410                 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
            420                 425                 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
        435                 440                 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
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Gln Ala Leu Pro Pro Arg
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