

SEQUENCE LISTING

<110> Juno Therapeutics, Inc.
SATHER, Blythe D.

<120> CHIMERIC ANTIGEN RECEPTORS SPECIFIC FOR
B-CELL MATURATION ANTIGEN AND ENCODING
POLYNUCLEOTIDES

<130> 735042004340

<140> PCT/US2018/058767

<141> 2018-11-01

<150> US 62/580,431

<151> 2017-11-01

<150> US 62/596,772

<151> 2017-12-08

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1 5

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Asp Tyr Tyr Met Ser
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Asp Tyr Ala Met His
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<400> 4

Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala Ser
1 5 10 15
Val Lys Gly

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 Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val Lys
 1 5 10 15
 Gly

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<400> 6
 Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val Lys
 1 5 10 15
 Gly

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Trp Ser Ala Pro Thr Asp Tyr

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Val Asp Gly Pro Pro Ser Ser Asp Ile

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Val Asp Gly Asp Tyr Val Asp Asp Tyr

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Val Asp Gly Pro Pro Ser Phe Asp Ile
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Asp Leu Gly Pro Asp Tyr Asp Pro Asp Ala Phe Asp Ile
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Arg Ser Lys Ala Tyr Gly Gly Thr
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Ser Ser Ser Gly Ser Thr
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Ser Trp Asn Ser Gly Ser
1 5

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 1 5 10

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Gly Phe Pro Phe Ser Asp Tyr Tyr Met Ser
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Gly Phe Thr Phe Asp Asp Tyr Ala Met His
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Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu
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(aa) AbM numbering

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Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr
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Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly
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<223> BCMA-1 CDR-L1 (aa)

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Lys Ser Ser Gln Ser Val Leu Ser Thr Ser Asn Asn Lys Asn Tyr Leu
1 5 10 15
Ala

<210> 27

<211> 11

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<223> BCMA-2 CDR-L1 (aa)

<400> 27

Arg	Ala	Ser	Gln	Ser	Ile	Lys	Thr	Asn	Leu	Ala
1				5					10	

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Lys	Ser	Ser	Gln	Ser	Val	Leu	His	Ser	Ser	Asn	Asn	Lys	Asn	Tyr	Leu
1				5					10					15	

Ala

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Arg	Ala	Ser	Gln	Asp	Ile	Arg	Asn	Ser	Leu	Ala
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Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn Asn Lys Asn Tyr Leu

1 5 10 15

Ala

<210> 31

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<223> BCMA-6 CDR-L1 (aa)

<400> 31

Arg Ala Ser Gln Ser Ile Ser Asn Ser Leu Ala

1 5 10

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Arg Ala Ser Gln Asp Ile Gly Asp Tyr Leu Ala

1 5 10

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 Gly Ala Asn Asn Ile Gly Ser Lys Ser Val His
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 Gly Gly Asn Asn Ile Glu Arg Lys Asn Val His
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 Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Ala Val Asn
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 Ser Gly Ser Arg Ser Asn Ile Gly Asn Asn Tyr Val Ser
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<400> 37
 Trp Ala Ser Thr Arg Glu Ala
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<400> 38
 Ala Ala Ser Thr Arg Ala Thr
 1 5

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<400> 39
 Trp Ala Ser Thr Arg Glu Ser
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 Ala Ala Ser Arg Leu Glu Ser
 1 5

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 Ala Ala Ser Asn Val Glu Asp
 1 5

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 Val Ala Ser Thr Leu Gln Ser
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 Asp Asp Asp Asp Arg Pro Ser
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<400> 44
 Asp Asp Ser Asp Arg Ala Ser
 1 5

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 Asn Ser His Gln Arg Pro Ser
 1 5

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<400> 46
 Asp Asn Ala Lys Arg Pro Ser
 1 5

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<400> 47
 Gln Gln Tyr Phe Ser Ser Pro Tyr Thr
 1 5

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 Gln Gln Tyr Gly Ser Ser Pro Thr
 1 5

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 Gln Gln Tyr Tyr Thr Thr Pro Leu Thr
 1 5

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 Gln Gln Tyr Tyr Ser Leu Pro Leu Ser
 1 5

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Gln Gln Tyr Tyr Ser Thr Pro Trp Thr
 1             5

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<400> 52
Gln Gln Ser His Met Tyr Pro Pro Thr
 1             5

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Gln Gln Tyr His Ser His Pro Trp Thr
 1             5

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Gln Gln Tyr Tyr Ser Thr Pro Tyr Thr
1 5

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His Val Trp Asp Arg Ser Arg Asp His Tyr Val
1 5 10

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Gln Ala Trp Asp Ser Ser Ser Thr Leu Tyr Val
1 5 10

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<400> 57
 Ala Ala Trp Asp Asp Ser Leu Arg Gly Tyr Val
 1 5 10

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 Gln Val Trp Asp Ser Ser Ser Asp His Trp Val
 1 5 10

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 1 5 10 15
 Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly

20

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30

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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

20

25

30

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<400> 61

Glu Val Gln Leu Val Gln 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

20

25

30

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<223> BCMA-10 VH FR1 (aa)

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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	Pro	Phe	Ser		
			20					25					30		

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<400> 63

Gln	Val	Gln	Leu	Val	Gln	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	Asp		
			20					25					30		

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-44, -45, -46, -51 VH FR2 (aa)

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Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	Gly
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Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
1 5 10

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

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-44, -45, -46, -51 VH FR3 (aa)

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

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

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 -35, -36, -38, -39 VH FR3 (aa)

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 1 5 10 15
 Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
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Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
1 5 10

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<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-1 VL FR1 (aa)

<400> 72

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ser Val Ser Pro Gly
1 5 10 15
Glu Arg Ala Thr Ile Ser Cys
20

<210> 73

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-2 VL FR1 (aa)

<400> 73

Glu	Ile	Val	Met	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Val	Ser	Pro	Gly
1				5					10					15	
Glu	Thr	Ala	Thr	Leu	Ser	Cys									
			20												

<210> 74

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-3, -46 VL FR1 (aa)

<400> 74

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Val	Val	Ser	Leu	Gly
1				5					10					15	
Glu	Arg	Ala	Thr	Ile	Asn	Cys									
			20												

<210> 75

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-4 VL FR1 (aa)

<400> 75

Ala	Ile	Arg	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Leu	Gly
1				5					10					15	
Asp	Arg	Val	Thr	Ile	Thr	Cys									
			20												

<210> 76
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-5, -8, -24 VL FR1 (aa)

<400> 76
 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
 20

<210> 77
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-6 VL FR1 (aa)

<400> 77
 Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Val Gly
 1 5 10 15
 Glu Arg Val Thr Ile Thr Cys
 20

<210> 78
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-7 VL FR1 (aa)

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<400> 78

Val	Ile	Gln	Leu	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5				10						15	
Asp	Arg	Val	Thr	Ile	Thr	Cys									
			20												

<210> 79

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-9 VL FR1 (aa)

<400> 79

Ser	Tyr	Glu	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Gln
1				5				10						15	
Thr	Ala	Arg	Val	Thr	Cys										
			20												

<210> 80

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-10, -26 VL FR1 (aa)

<400> 80

Ser	Tyr	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Gln
1				5				10						15	
Thr	Ala	Arg	Ile	Thr	Cys										
			20												

<210> 81

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-11 VL FR1 (aa)

<400> 81

Gln	Leu	Val	Leu	Thr	Gln	Pro	Pro	Ser	Ala	Ser	Gly	Thr	Pro	Gly	Gln
1				5				10						15	
Arg	Val	Thr	Ile	Ser	Cys										
			20												

<210> 82

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-12 VL FR1 (aa)

<400> 82

Gln	Ser	Ala	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Ala	Ala	Pro	Gly	Gln
1				5				10						15	
Lys	Val	Thr	Ile	Ser	Cys										
			20												

<210> 83

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-1 VL FR2 (aa)

<400> 83

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro	Arg	Leu	Leu	Leu	Tyr
1				5				10						15

<210> 84

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-2, -34 VL FR2 (aa)

<400> 84

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile	Tyr
1				5					10					15

<210> 85

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-3, -5, -8, -24, -44, -46 VL FR2 (aa)

<400> 85

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro	Lys	Leu	Leu	Ile	Tyr
1				5					10					15

<210> 86

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-4 VL FR2 (aa)

<400> 86

Trp	Tyr	Gln	Gln	Arg	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Leu	Ser
1				5					10					15

<210> 87

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-6 VL FR2 (aa)

<400> 87

Trp	Tyr	Lys	Gln	Arg	Pro	Gly	Glu	Ala	Pro	Lys	Leu	Leu	Ile	His
1				5					10					15

<210> 88

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-7 VL FR2 (aa)

<400> 88

Trp	Phe	Gln	Gln	Arg	Pro	Gly	Lys	Ala	Pro	Lys	Ser	Leu	Ile	Tyr
1				5					10					15

<210> 89

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-9, -26, -35 VL FR2 (aa)

<400> 89

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Met	Leu	Val	Val	Tyr
1				5					10					15

<210> 90
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-10 VL FR2 (aa)

<400> 90
 Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Pro Val Val Tyr
 1 5 10 15

<210> 91
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-11 VL FR2 (aa)

<400> 91
 Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Glu Val Leu Ile Tyr
 1 5 10 15

<210> 92
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-12 VL FR2 (aa)

<400> 92
 Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr
 1 5 10 15

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<210> 93
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-1, -3, -5, -8, -31, -44, -46 VL FR3 (aa)

<400> 93
 Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15
 Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys
 20 25 30

<210> 94
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-2 VL FR3 (aa)

<400> 94
 Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15
 Leu Thr Ile Thr Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
 20 25 30

<210> 95
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-4 VL FR3 (aa)

<400> 95

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

<210> 96
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-6 VL FR3 (aa)

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

<210> 97
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-7 VL FR3 (aa)

Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	His	Phe	Thr
1				5					10					15	
Leu	Thr	Ile	Asn	Ser	Leu	Gln	Pro	Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys
			20					25					30		

<210> 98
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-9, -26, -35 VL FR3 (aa)

<400> 98

Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser	Asn	Ser	Gly	Asn	Thr	Ala	Thr
1				5				10					15		
Leu	Thr	Ile	Ser	Gly	Val	Glu	Ala	Gly	Asp	Glu	Ala	Asp	Tyr	Phe	Cys
			20					25					30		

<210> 99

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-10 VL FR3 (aa)

<400> 99

Gly	Ile	Pro	Glu	Arg	Phe	Ser	Ala	Ser	Asn	Ser	Gly	Asn	Thr	Ala	Thr
1				5				10					15		
Leu	Thr	Ile	Ser	Gly	Ala	Gln	Ala	Thr	Asp	Glu	Ala	Glu	Tyr	Tyr	Cys
			20					25					30		

<210> 100

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-11 VL FR3 (aa)

<400> 100

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

<210> 101
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-12 VL FR3 (aa)

<400> 101
 Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Thr
 1 5 10 15
 Leu Asp Ile Ala Gly Leu Gln Thr Gly Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 102
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-1 VL FR4 (aa)

<400> 102
 Phe Gly His Gly Thr Lys Leu Glu Ile Lys
 1 5 10

<210> 103
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-2, -39 VL FR4 (aa)

<400> 103
 Phe Gly Arg Gly Thr Lys Leu Glu Ile Lys
 1 5 10

<210> 104
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-3, -4, -6, -30, -46 VL FR4 (aa)

<400> 104
 Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 1 5 10

<210> 105
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-5, -45 VL FR4 (aa)

<400> 105
 Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
 1 5 10

<210> 106
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-7 VL FR4 (aa)

<400> 106
 Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
 1 5 10

<210> 107
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-8, -44 VL FR4 (aa)

<400> 107
 Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 1 5 10

<210> 108
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-9, -10, -11, -26, -40, -47 VL FR4 (aa)

<400> 108
 Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
 1 5 10

<210> 109
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-12, -14, -15, -16, -17, -18, -32, -33, -36,
 -37, -38, -41, -48, -49, -50 VL FR4 (aa)

<400> 109
 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu

1

5

<210> 110
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-1, -3, -4, -5, -6, -7, -8, -45, -46 VH Chain
(aa)

<400> 110
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
20 25 30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
50 55 60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
65 70 75 80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
85 90 95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser
115

<210> 111
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-2 VH Chain (aa)

<400> 111
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95
 Ala Lys Val Asp Gly Pro Pro Ser Ser Asp Ile Trp Gly Gln Gly Thr
 100 105 110
 Met Val Thr Val Ser Ser
 115

<210> 112

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-9 VH Chain (aa)

<400> 112

Glu Val Gln Leu Val Gln 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95
 Ala Arg Val Asp Gly Asp Tyr Val Asp Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Leu Val Thr Val Ser Ser
 115

<210> 113

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-10 VH Chain (aa)

<400> 113

```

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 Pro Phe Ser Asp Tyr
 20             25             30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35             40             45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85             90             95
Ala Lys Val Asp Gly Pro Pro Ser Phe Asp Ile Trp Gly Gln Gly Thr
100             105             110
Met Val Thr Val Ser Ser
115

```

<210> 114

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-11 VH Chain (aa)

<400> 114

```

Gln Val Gln Leu Val Gln 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 Asp Asp Tyr
 20             25             30
Ala Met His Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
 35             40             45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
 50             55             60

```

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```

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 Val Tyr Tyr Cys
          85          90          95
Ala Arg Asp Leu Gly Pro Asp Tyr Asp Pro Asp Ala Phe Asp Ile Trp
          100         105         110
Gly Gln Gly Thr Met Val Thr Val Ser Ser
          115          120

```

<210> 115
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-12, -26, -48 VH Chain (aa)

```

<400> 115
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 Asp Tyr
          20      25      30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35      40      45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
          85          90          95
Ala Lys Val Asp Gly Pro Pro Ser Phe Asp Ile Trp Gly Gln Gly Thr
          100         105         110
Met Val Thr Val Ser Ser
          115

```

<210> 116
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>

<223> BCMA-1 VL Chain (aa)

<400> 116

```

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ser Val Ser Pro Gly
 1           5           10           15
Glu Arg Ala Thr Ile Ser Cys Lys Ser Ser Gln Ser Val Leu Ser Thr
 20           25           30
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35           40           45
Pro Pro Arg Leu Leu Leu Tyr Trp Ala Ser Thr Arg Glu Ala Gly Val
 50           55           60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65           70           75           80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85           90           95
Tyr Phe Ser Ser Pro Tyr Thr Phe Gly His Gly Thr Lys Leu Glu Ile
 100          105          110
Lys

```

<210> 117

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-2 VL Chain (aa)

<400> 117

```

Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1           5           10           15
Glu Thr Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Lys Thr Asn
 20           25           30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
 35           40           45
Tyr Ala Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly
 50           55           60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Thr Arg Leu Glu Pro
 65           70           75           80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro Thr
 85           90           95
Phe Gly Arg Gly Thr Lys Leu Glu Ile Lys
 100          105

```

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<210> 118
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-3, -46 VL Chain (aa)

<400> 118
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Val Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu His Ser
 20 25 30
 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Thr Thr Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile
 100 105 110
 Lys

<210> 119
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-4 VL Chain (aa)

<400> 119
 Ala Ile Arg Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Arg Asn Ser
 20 25 30

354246_1.txt

```

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

```

<210> 120
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-5 VL Chain (aa)

```

<400> 120
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 Lys Ser Ser Gln Ser Val Leu Tyr Ser
          20          25          30
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
          35          40          45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
          50          55          60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65          70          75          80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
          85          90          95
Tyr Tyr Ser Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Asp Ile
          100          105          110
Lys

```

<210> 121
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-6 VL Chain (aa)

<400> 121

```

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Val Gly
 1           5           10           15
Glu Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Asn Ser
 20           25           30
Leu Ala Trp Tyr Lys Gln Arg Pro Gly Glu Ala Pro Lys Leu Leu Ile
 35           40           45
His Ala Ala Ser Asn Val Glu Asp Gly Val Pro Ser Arg Phe Ser Gly
 50           55           60
Arg Gly Ser Gly Thr Val Phe Thr Leu Ala Ile Ser Asn Val Gln Pro
 65           70           75           80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser His Met Tyr Pro Pro
 85           90           95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100           105

```

<210> 122

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-7 VL Chain (aa)

<400> 122

```

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

```

<210> 123
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-8 VL Chain (aa)

<400> 123
 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 Lys Ser Ser Gln Ser Val Leu Tyr Ser
 20 25 30
 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Ser Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
 100 105 110
 Lys

<210> 124
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-9 VL Chain (aa)

<400> 124
 Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln
 1 5 10 15
 Thr Ala Arg Val Thr Cys Gly Ala Asn Asn Ile Gly Ser Lys Ser Val
 20 25 30

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

<210> 125

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-10 VL Chain (aa)

<400> 125

Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln
1 5 10 15
Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile Glu Arg Lys Asn Val
20 25 30
His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Pro Val Val Tyr
35 40 45
Asp Asp Ser Asp Arg Ala Ser Gly Ile Pro Glu Arg Phe Ser Ala Ser
50 55 60
Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Gly Ala Gln Ala Thr
65 70 75 80
Asp Glu Ala Glu Tyr Tyr Cys Gln Ala Trp Asp Ser Ser Ser Thr Leu
85 90 95
Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
100 105

<210> 126

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

354246_1.txt

<220>

<223> BCMA-11 VL Chain (aa)

<400> 126

Gln	Leu	Val	Leu	Thr	Gln	Pro	Pro	Ser	Ala	Ser	Gly	Thr	Pro	Gly	Gln
1				5					10					15	
Arg	Val	Thr	Ile	Ser	Cys	Ser	Gly	Ser	Ser	Ser	Asn	Ile	Gly	Ser	Asn
			20					25					30		
Ala	Val	Asn	Trp	Tyr	Gln	Gln	Leu	Pro	Gly	Thr	Ala	Pro	Glu	Val	Leu
		35					40					45			
Ile	Tyr	Asn	Ser	His	Gln	Arg	Pro	Ser	Gly	Val	Pro	Asp	Arg	Phe	Ser
	50					55					60				
Gly	Ser	Lys	Ser	Gly	Thr	Ser	Ala	Ser	Leu	Ala	Ile	Asn	Gly	Leu	Gln
65					70					75				80	
Ser	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Ala	Ala	Trp	Asp	Asp	Ser	Leu
				85					90					95	
Arg	Gly	Tyr	Val	Phe	Gly	Thr	Gly	Thr	Lys	Leu	Thr	Val	Leu		
			100					105					110		

<210> 127

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-12 VL Chain (aa)

<400> 127

Gln	Ser	Ala	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Ala	Ala	Pro	Gly	Gln
1				5					10					15	
Lys	Val	Thr	Ile	Ser	Cys	Ser	Gly	Ser	Arg	Ser	Asn	Ile	Gly	Asn	Asn
			20					25					30		
Tyr	Val	Ser	Trp	Tyr	Gln	Gln	Leu	Pro	Gly	Thr	Ala	Pro	Lys	Leu	Leu
		35					40					45			
Ile	Tyr	Asp	Asn	Ala	Lys	Arg	Pro	Ser	Gly	Ile	Pro	Asp	Arg	Phe	Ser
	50					55					60				
Gly	Ser	Lys	Ser	Gly	Thr	Ser	Ala	Thr	Leu	Asp	Ile	Ala	Gly	Leu	Gln
65					70					75				80	
Thr	Gly	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Val	Trp	Asp	Ser	Ser	Ser
				85					90					95	
Asp	His	Trp	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu		
			100					105					110		

354246_1.txt

<210> 128
 <211> 246
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-1 scFv (aa)

<400> 128
 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30
 Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
 50 55 60
 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
 65 70 75 80
 Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115 120 125
 Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu
 130 135 140
 Ser Val Ser Pro Gly Glu Arg Ala Thr Ile Ser Cys Lys Ser Ser Gln
 145 150 155 160
 Ser Val Leu Ser Thr Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln
 165 170 175
 Gln Lys Pro Gly Gln Pro Pro Arg Leu Leu Leu Tyr Trp Ala Ser Thr
 180 185 190
 Arg Glu Ala Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
 195 200 205
 Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val
 210 215 220
 Tyr Tyr Cys Gln Gln Tyr Phe Ser Ser Pro Tyr Thr Phe Gly His Gly
 225 230 235 240
 Thr Lys Leu Glu Ile Lys
 245

<210> 129
 <211> 239

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-2 scFv (aa)

<400> 129

```

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 Asp Tyr
 20             25             30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35             40             45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85             90             95
Ala Lys Val Asp Gly Pro Pro Ser Ser Asp Ile Trp Gly Gln Gly Thr
100            105            110
Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115            120            125
Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
130            135            140
Ser Val Ser Pro Gly Glu Thr Ala Thr Leu Ser Cys Arg Ala Ser Gln
145            150            155            160
Ser Ile Lys Thr Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
165            170            175
Pro Arg Leu Leu Ile Tyr Ala Ala Ser Thr Arg Ala Thr Gly Ile Pro
180            185            190
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195            200            205
Thr Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr
210            215            220
Gly Ser Ser Pro Thr Phe Gly Arg Gly Thr Lys Leu Glu Ile Lys
225            230            235

```

<210> 130

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-3, 46 scFv (aa)

<400> 130

```

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1          5          10          15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20          25          30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35          40          45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
 50          55          60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
 65          70          75          80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85          90          95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
 100         105         110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115         120         125
Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu
 130         135         140
Val Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln
 145         150         155         160
Ser Val Leu His Ser Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln
 165         170         175
Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr
 180         185         190
Arg Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
 195         200         205
Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val
 210         215         220
Tyr Tyr Cys Gln Gln Tyr Tyr Thr Thr Pro Leu Thr Phe Gly Gly Gly
 225         230         235         240
Thr Lys Val Glu Ile Lys
          245

```

<210> 131

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

354246_1.txt

<220>

<223> BCMA-4 scFv (aa)

<400> 131

```

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1           5           10           15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20           25           30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35           40           45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
 50           55           60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
 65           70           75           80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85           90           95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
 100          105          110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115          120          125
Gly Gly Gly Gly Ser Ala Ile Arg Met Thr Gln Ser Pro Ser Ser Leu
 130          135          140
Ser Ala Ser Leu Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln
 145          150          155          160
Asp Ile Arg Asn Ser Leu Ala Trp Tyr Gln Gln Arg Pro Gly Lys Ala
 165          170          175
Pro Lys Leu Leu Leu Ser Ala Ala Ser Arg Leu Glu Ser Gly Val Pro
 180          185          190
Ser Arg Phe Ser Gly Thr Thr Ser Gly Ala Glu Tyr Ala Leu Ser Ile
 195          200          205
Ser Ser Leu Gln Pro Glu Asp Val Ala Ser Tyr Phe Cys Gln Gln Tyr
 210          215          220
Tyr Ser Leu Pro Leu Ser Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 225          230          235          240

```

<210> 132

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-5 scFv (aa)

<400> 132

354246_1.txt

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
1				5				10						15	
Ser	Leu	Arg	Leu	Ser	Cys	Thr	Ala	Ser	Gly	Phe	Thr	Phe	Gly	Asp	Tyr
			20					25						30	
Ala	Met	Ser	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35				40						45		
Gly	Phe	Ile	Arg	Ser	Lys	Ala	Tyr	Gly	Gly	Thr	Thr	Glu	Tyr	Ala	Ala
	50					55					60				
Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asp	Ser	Lys	Ser	Ile
65					70					75					80
Ala	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Lys	Thr	Glu	Asp	Thr	Ala	Val	Tyr
				85					90					95	
Tyr	Cys	Ala	Ala	Trp	Ser	Ala	Pro	Thr	Asp	Tyr	Trp	Gly	Gln	Gly	Thr
			100					105					110		
Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser
		115					120					125			
Gly	Gly	Gly	Gly	Ser	Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu
	130					135					140				
Ala	Val	Ser	Leu	Gly	Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln
145					150					155					160
Ser	Val	Leu	Tyr	Ser	Ser	Asn	Asn	Lys	Asn	Tyr	Leu	Ala	Trp	Tyr	Gln
				165					170					175	
Gln	Lys	Pro	Gly	Gln	Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Ala	Ser	Thr
			180					185					190		
Arg	Glu	Ser	Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr
		195					200					205			
Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val
	210					215					220				
Tyr	Tyr	Cys	Gln	Gln	Tyr	Tyr	Ser	Thr	Pro	Trp	Thr	Phe	Gly	Gln	Gly
225					230					235					240
Thr	Lys	Val	Asp	Ile	Lys										
				245											

<210> 133

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-6 scFv (aa)

<400> 133

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

354246_1.txt

```

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
  20                      25                      30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
  35                      40                      45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
  50                      55                      60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
  65                      70                      75                      80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
  85                      90                      95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
 100                     105                     110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115                     120                     125
Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu
 130                     135                     140
Ser Val Ser Val Gly Glu Arg Val Thr Ile Thr Cys Arg Ala Ser Gln
 145                     150                     155                     160
Ser Ile Ser Asn Ser Leu Ala Trp Tyr Lys Gln Arg Pro Gly Glu Ala
 165                     170                     175
Pro Lys Leu Leu Ile His Ala Ala Ser Asn Val Glu Asp Gly Val Pro
 180                     185                     190
Ser Arg Phe Ser Gly Arg Gly Ser Gly Thr Val Phe Thr Leu Ala Ile
 195                     200                     205
Ser Asn Val Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser
 210                     215                     220
His Met Tyr Pro Pro Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 225                     230                     235                     240

```

<210> 134

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-7 scFv (aa)

<400> 134

```

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
  1                      5                      10                     15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
  20                      25                      30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
  35                      40                      45

```

354246_1.txt

```

Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
 50          55          60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
 65          70          75          80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
          85          90          95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
          100          105          110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
          115          120          125
Gly Gly Gly Gly Ser Val Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu
          130          135          140
Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln
          145          150          155          160
Asp Ile Gly Asp Tyr Leu Ala Trp Phe Gln Gln Arg Pro Gly Lys Ala
          165          170          175
Pro Lys Ser Leu Ile Tyr Val Ala Ser Thr Leu Gln Ser Gly Val Pro
          180          185          190
Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr His Phe Thr Leu Thr Ile
          195          200          205
Asn Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr
          210          215          220
His Ser His Pro Trp Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
          225          230          235          240

```

<210> 135

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-8 scFv (aa)

<400> 135

```

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1          5          10          15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
          20          25          30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35          40          45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
          50          55          60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
          65          70          75          80

```

354246_1.txt

```

Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
      85                      90                      95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
      100                    105                    110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
      115                    120                    125
Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu
      130                    135                    140
Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln
      145                    150                    155                    160
Ser Val Leu Tyr Ser Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln
      165                    170                    175
Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr
      180                    185                    190
Arg Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
      195                    200                    205
Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val
      210                    215                    220
Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Tyr Thr Phe Gly Gln Gly
      225                    230                    235                    240
Thr Lys Leu Glu Ile Lys
      245

```

<210> 136

<211> 241

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-9 scFv (aa)

<400> 136

```

Glu Val Gln Leu Val Gln 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 Asp Tyr
      20      25      30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35      40      45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
      85      90      95

```

354246_1.txt

Ala Arg Val Asp Gly Asp Tyr Val Asp Asp Tyr Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
115 120 125
Gly Gly Gly Gly Ser Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser
130 135 140
Val Ala Pro Gly Gln Thr Ala Arg Val Thr Cys Gly Ala Asn Asn Ile
145 150 155 160
Gly Ser Lys Ser Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
165 170 175
Met Leu Val Val Tyr Asp Asp Asp Asp Arg Pro Ser Gly Ile Pro Glu
180 185 190
Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser
195 200 205
Gly Val Glu Ala Gly Asp Glu Ala Asp Tyr Phe Cys His Val Trp Asp
210 215 220
Arg Ser Arg Asp His Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val
225 230 235 240
Leu

<210> 137
<211> 241
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-10 scFv (aa)

<400> 137
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 Pro Phe Ser Asp Tyr
20 25 30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95
Ala Lys Val Asp Gly Pro Pro Ser Phe Asp Ile Trp Gly Gln Gly Thr
100 105 110

354246_1.txt

```

Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
  115                      120                      125
Gly Gly Gly Gly Ser Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser
  130                      135                      140
Val Ala Pro Gly Gln Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile
  145                      150                      155                      160
Glu Arg Lys Asn Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
  165                      170                      175
Val Pro Val Val Tyr Asp Asp Ser Asp Arg Ala Ser Gly Ile Pro Glu
  180                      185                      190
Arg Phe Ser Ala Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser
  195                      200                      205
Gly Ala Gln Ala Thr Asp Glu Ala Glu Tyr Tyr Cys Gln Ala Trp Asp
  210                      215                      220
Ser Ser Ser Thr Leu Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val
  225                      230                      235                      240
Leu

```

<210> 138

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-11 scFv (aa)

<400> 138

```

Gln Val Gln Leu Val Gln 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 Asp Asp Tyr
  20                      25                      30
Ala Met His Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
  35                      40                      45
Ser Gly 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 Asn Ser 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 Asp Leu Gly Pro Asp Tyr Asp Pro Asp Ala Phe Asp Ile Trp
  100                     105                     110
Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
  115                      120                      125

```

354246_1.txt

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Leu Val Leu Thr Gln Pro
130 135 140
Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser
145 150 155 160
Gly Ser Ser Ser Asn Ile Gly Ser Asn Ala Val Asn Trp Tyr Gln Gln
165 170 175
Leu Pro Gly Thr Ala Pro Glu Val Leu Ile Tyr Asn Ser His Gln Arg
180 185 190
Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser
195 200 205
Ala Ser Leu Ala Ile Asn Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr
210 215 220
Tyr Cys Ala Ala Trp Asp Asp Ser Leu Arg Gly Tyr Val Phe Gly Thr
225 230 235 240
Gly Thr Lys Leu Thr Val Leu
245

<210> 139

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-12 scFv (aa)

<400> 139

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 Asp Tyr
20 25 30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95
Ala Lys Val Asp Gly Pro Pro Ser Phe Asp Ile Trp Gly Gln Gly Thr
100 105 110
Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125
Gly Gly Gly Gly Ser Gln Ser Ala Leu Thr Gln Pro Pro Ser Val Ser
130 135 140

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Ala	Ala	Pro	Gly	Gln	Lys	Val	Thr	Ile	Ser	Cys	Ser	Gly	Ser	Arg	Ser
145					150					155					160
Asn	Ile	Gly	Asn	Asn	Tyr	Val	Ser	Trp	Tyr	Gln	Gln	Leu	Pro	Gly	Thr
				165					170						175
Ala	Pro	Lys	Leu	Leu	Ile	Tyr	Asp	Asn	Ala	Lys	Arg	Pro	Ser	Gly	Ile
			180					185						190	
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Lys	Ser	Gly	Thr	Ser	Ala	Thr	Leu	Asp
		195					200						205		
Ile	Ala	Gly	Leu	Gln	Thr	Gly	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Val
	210					215					220				
Trp	Asp	Ser	Ser	Ser	Asp	His	Trp	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu
225					230					235					240
Thr	Val	Leu													

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<220>
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<220>
 <223> BCMA-13 CDR-H1 (aa) Kabat numbering

<400> 140
 Ser Tyr Ala Met His
 1 5

<210> 141
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <223> BCMA-14, -15 CDR-H1 (aa) Kabat numbering

<400> 141
 Ser Tyr Gly Met His
 1 5

<210> 142
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <223> BCMA-16 CDR-H1 (aa) Kabat numbering

<400> 142
 Ser Ser Ala Met Gln
 1 5

<210> 143
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <223> BCMA-18 CDR-H1 (aa) Kabat numbering

<400> 143
 Ser Tyr Trp Met Ser
 1 5

<210> 144
 <211> 5
 <212> PRT
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<220>
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<220>
 <223> BCMA-19 CDR-H1 (aa) Kabat numbering

<400> 144
 Ser Tyr Tyr Met His
 1 5

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<210> 145
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <223> BCMA-13, -14, -15 CDR-H2 (aa) Kabat numbering

<400> 145
 Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val Lys
 1 5 10 15
 Gly

<210> 146
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <223> BCMA-16 CDR-H2 (aa) Kabat numbering

<400> 146
 Trp Ile Val Val Gly Ser Gly Asn Thr Asn Tyr Ala Gln Lys Phe Gln
 1 5 10 15
 Glu

<210> 147
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <223> BCMA-18 CDR-H2 (aa) Kabat numbering

<400> 147

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His Ile Asn Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val Lys
1 5 10 15
Gly

<210> 148

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 CDR-H2 (aa) Kabat numbering

<400> 148

Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe Gln
1 5 10 15
Gly

<210> 149

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13, -14 CDR-H3 (aa)

<400> 149

Leu Pro Gly Arg Asp Gly Tyr Pro Gly Ala Phe Asp Tyr
1 5 10

<210> 150

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-15 CDR-H3 (aa)

<400> 150

Asp	Gln	Tyr	Ser	Ser	Ser	Ala	Gln	Arg	Ala	Asp	Phe	Asp	Tyr
1				5					10				

<210> 151

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 CDR-H3 (aa)

<400> 151

Ala	Pro	Tyr	Tyr	Asp	Ile	Leu	Thr	Gly	Tyr	Tyr	Leu
1				5					10		

<210> 152

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-17, -33 CDR-H3 (aa)

<400> 152

Glu	Ala	Asp	Ser	Ser	Ala	Asp	Tyr
1				5			

<210> 153

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-18 CDR-H3 (aa)

<400> 153

Trp Leu Ala Val Thr Asn

1 5

<210> 154

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 CDR-H3 (aa)

<400> 154

Asp Gly Gly Asp Val

1 5

<210> 155

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20, -27 CDR-H3 (aa)

<400> 155

Gly Gly Leu Gly Ile Thr Pro Tyr Tyr Phe Asp Tyr

1 5 10

<210> 156

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-21 CDR-H3 (aa)

<400> 156

Val Asp Gly Gly Tyr Thr Glu Asp Tyr

1 5

<210> 157

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-22, -23, -40 CDR-H3 (aa)

<400> 157

Val Asp Gly Asp Tyr Thr Glu Asp Tyr

1 5

<210> 158

<211> 7

<212> PRT

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<220>

<223> Synthetic

<220>

<223> BCMA-13, -14, -15, -18 CDR-H1 (aa) Chothia
numbering

<400> 158

Gly Phe Thr Phe Ser Ser Tyr

1 5

<210> 159

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 CDR-H1 (aa) Chothia numbering

<400> 159

Gly Phe Thr Phe Thr Ser Ser
1 5

<210> 160

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 CDR-H1 (aa) Chothia numbering

<400> 160

Gly Tyr Thr Phe Thr Ser Tyr
1 5

<210> 161

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13, -14, -15 CDR-H2 (aa) Chothia numbering

<400> 161

Ser Tyr Asp Gly Ser Asn
1 5

<210> 162

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 CDR-H2 (aa) Chothia numbering

<400> 162

Val Val Gly Ser Gly Asn
1 5

<210> 163

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-18 CDR-H2 (aa) Chothia numbering

<400> 163

Asn Gln Asp Gly Ser Glu
1 5

<210> 164

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 CDR-H2 (aa) Chothia numbering

<400> 164

Asn Pro Asn Ser Gly Gly
1 5

<210> 165

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13 CDR-H1 (aa) AbM numbering

<400> 165

Gly	Phe	Thr	Phe	Ser	Ser	Tyr	Ala	Met	His
1				5					10

<210> 166

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-14, -15 CDR-H1 (aa) AbM numbering

<400> 166

Gly	Phe	Thr	Phe	Ser	Ser	Tyr	Gly	Met	His
1				5					10

<210> 167

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 CDR-H1 (aa) AbM numbering

<400> 167

Gly	Phe	Thr	Phe	Thr	Ser	Ser	Ala	Met	Gln
1				5					10

<210> 168

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-18 CDR-H1 (aa) AbM numbering

<400> 168

Gly	Phe	Thr	Phe	Ser	Ser	Tyr	Trp	Met	Ser
1				5					10

<210> 169

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 CDR-H1 (aa) AbM numbering

<400> 169

Gly	Tyr	Thr	Phe	Thr	Ser	Tyr	Tyr	Met	His
1				5					10

<210> 170

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13, -14, -15 CDR-H2 (aa) AbM numbering

<400> 170

Val	Ile	Ser	Tyr	Asp	Gly	Ser	Asn	Lys	Tyr
1				5					10

<210> 171

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 CDR-H2 (aa) AbM numbering

<400> 171

Trp	Ile	Val	Val	Gly	Ser	Gly	Asn	Thr	Asn
1				5					10

<210> 172

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-18 CDR-H2 (aa) AbM numbering

<400> 172

His	Ile	Asn	Gln	Asp	Gly	Ser	Glu	Lys	Tyr
1				5					10

<210> 173

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 CDR-H2 (aa) AbM numbering

<400> 173

Trp	Ile	Asn	Pro	Asn	Ser	Gly	Gly	Thr	Asn
1				5					10

<210> 174

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13, -14, -15, -16, -18, -21 CDR-L1 (aa)

<400> 174

Gly	Ser	Gly	Ser	Asn	Ile	Gly	Ser	Asn	Asp	Val	Ser
1				5					10		

<210> 175

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-17, -33 CDR-L1 (aa)

<400> 175

Gly	Gly	Asn	Asn	Ile	Gly	Phe	Lys	Gly	Val	Gln
1				5					10	

<210> 176

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 CDR-L1 (aa)

<400> 176

Thr	Gly	Thr	Ser	Ser	Asp	Val	Gly	Asp	Tyr	Asn	Tyr	Val	Ala
1				5					10				

<210> 177

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20, -27 CDR-L1 (aa)

<400> 177

Ser Gly Gly Lys Thr Val Asn
1 5

<210> 178

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-22, -23 CDR-L1 (aa)

<400> 178

Thr Gly Ser Ser Ser Asp Val Gly Lys Tyr Asn Leu Val Ser
1 5 10

<210> 179

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13, -14, -15, -16, -18, -21 CDR-L2 (aa)

<400> 179

Trp Asn Asp Gln Arg Pro Ser
1 5

<210> 180

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-17, -32, -33 CDR-L2 (aa)

<400> 180

Asp Asp Ser Asp Arg Pro Ser
1 5

<210> 181

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 CDR-L2 (aa)

<400> 181

Glu Val Ile Asn Arg Pro Ser
1 5

<210> 182

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20, -27 CDR-L2 (aa)

<400> 182

Ser Asn Asp Gln Arg Pro Ser
1 5

<210> 183

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-22, -23, -40 CDR-L2 (aa)

<400> 183

Asp Val Asn Lys Arg Pro Ser
1 5

<210> 184

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13 CDR-L3 (aa)

<400> 184

Ala Ala Trp Asp Asp Ser Leu Gly Gly Ser Trp Val
1 5 10

<210> 185

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-14 CDR-L3 (aa)

<400> 185

Ala Ala Trp Asp Asp Arg Leu Asn Gly Phe Trp Val
1 5 10

<210> 186

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-15 CDR-L3 (aa)

<400> 186

Ala Ala Trp Asp Asp Ser Leu Ser Gly Trp Val
1 5 10

<210> 187

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 CDR-L3 (aa)

<400> 187

Ala Ser Trp Asp Asp Ser Leu Ser Gly Trp Val
1 5 10

<210> 188

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-17, -33 CDR-L3 (aa)

<400> 188

Gln Val Trp Asp Ser Ala Ser Asp His Trp Val
1 5 10

<210> 189

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-18 CDR-L3 (aa)

<400> 189

Ala Ala Trp Asp Asp Ser Leu Asn Gly Trp Val
1 5 10

<210> 190

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 CDR-L3 (aa)

<400> 190

Ile Ser Tyr Ser Arg Gly Ser Thr Pro Tyr Val
1 5 10

<210> 191

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20, -27 CDR-L3 (aa)

<400> 191

Gly Ser Trp Asp Asp Ser Leu Asn Ala Trp Val
1 5 10

<210> 192

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-21 CDR-L3 (aa)

<400> 192

Ala	Ala	Trp	Asp	Asp	Ser	Leu	Asn	Gly	Tyr	Val
1				5					10	

<210> 193

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-22, -40 CDR-L3 (aa)

<400> 193

Cys	Ser	Tyr	Gly	Gly	Ser	Arg	Ser	Tyr	Val
1				5					10

<210> 194

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-23 CDR-L3 (aa)

<400> 194

Ser	Ser	Tyr	Gly	Gly	Ser	Arg	Ser	Tyr	Val
1				5					10

<210> 195

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13 VH FR1 (aa)

<400> 195

Gln	Met	Gln	Leu	Val	Gln	Tyr	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		
			20					25					30		

<210> 196

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-14 VH FR1 (aa)

<400> 196

Glu	Val	Gln	Leu	Leu	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		
			20					25					30		

<210> 197

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-15, -47 VH FR1 (aa)

<400> 197

Gln	Val	Gln	Leu	Leu	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		
			20					25					30		

<210> 198

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

<220>
 <223> Synthetic

<220>
 <223> BCMA-16 VH FR1 (aa)

<400> 198
 Glu Val Gln Leu Val Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Thr
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Thr Phe Thr
 20 25 30

<210> 199
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-17, -33, -36, -38, -41 VH FR1 (aa)

<400> 199
 Gln Val Gln Leu Val Gln 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
 20 25 30

<210> 200
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-18 VH FR1 (aa)

<400> 200
 Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

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1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
 20 25 30

<210> 201
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-19 VH FR1 (aa)

<400> 201
 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
 20 25 30

<210> 202
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-20 VH FR1 (aa)

<400> 202
 Glu Val Gln Leu Leu 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 Asp
 20 25 30

<210> 203
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

354246_1.txt

<220>

<223> BCMA-21 VH FR1 (aa)

<400> 203

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

<210> 204

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13, -14, -15 VH FR2 (aa)

<400> 204

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

<210> 205

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 VH FR2 (aa)

<400> 205

Trp	Val	Arg	Gln	Ala	Arg	Gly	Gln	Arg	Leu	Glu	Trp	Ile	Gly
1				5				10					

<210> 206

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-17 VH FR2 (aa)

<400> 206

Trp Ile Arg Leu Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
1 5 10

<210> 207

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-18 VH FR2 (aa)

<400> 207

Trp His Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val Ala
1 5 10

<210> 208

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 VH FR2 (aa)

<400> 208

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

<210> 209

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20, -27, -28, -29, -30, -34, -39 VH FR2 (aa)

<400> 209

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

<210> 210

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13 VH FR3 (aa)

<400> 210

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

<210> 211

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-14 VH FR3 (aa)

<400> 211

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

<210> 212

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

<220>
 <223> Synthetic

<220>
 <223> BCMA-15 VH FR3 (aa)

<400> 212
 Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15
 Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys
 20 25 30

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

<220>
 <223> Synthetic

<220>
 <223> BCMA-16 VH FR3 (aa)

<400> 213
 Arg Val Thr Ile Thr Arg Asp Met Ser Thr Ser Thr Ala Tyr Met Glu
 1 5 10 15
 Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

<210> 214
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-18 VH FR3 (aa)

<400> 214
 Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Ser Ser Leu Tyr Leu Gln

354246_1.txt

1	5	10	15
Met Asn Ser	Leu Arg Ala Glu Asp Thr	Ala Val Tyr Tyr Cys	Ala Arg
20	25	30	

<210> 215
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-19 VH FR3 (aa)

<400> 215															
Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr Met Glu															
1 5 10 15															
Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg															
20 25 30															

<210> 216
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-20, -27 VH FR3 (aa)

<400> 216															
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln															
1 5 10 15															
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Lys															
20 25 30															

<210> 217
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>

<223> BCMA-13 VH FR4 (aa)

<400> 217

Arg	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser
1				5					10	

<210> 218

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-14 VH FR4 (aa)

<400> 218

Arg	Gly	Pro	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser
1				5					10	

<210> 219

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-17, -33 VH FR4 (aa)

<400> 219

Trp	Gly	Gln	Gly	Thr	Leu	Val	Asn	Val	Ser	Ser
1				5					10	

<210> 220

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 VH FR4 (aa)

<400> 220

Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser
1				5					10	

<210> 221

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13, -14 VL FR1 (aa)

<400> 221

Gln	Ala	Val	Leu	Thr	Gln	Pro	Pro	Ser	Ala	Ser	Gly	Thr	Pro	Gly	Gln
1				5					10					15	
Arg	Val	Thr	Ile	Ser	Cys										
			20												

<210> 222

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-15, -18, -21 VL FR1 (aa)

<400> 222

Gln	Ser	Val	Leu	Thr	Gln	Pro	Pro	Ser	Ala	Ser	Gly	Thr	Pro	Gly	Gln
1				5					10					15	
Arg	Val	Thr	Ile	Ser	Cys										
			20												

<210> 223

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 VL FR1 (aa)

<400> 223

Gln	Ser	Ala	Leu	Thr	Gln	Pro	Pro	Ser	Ala	Ser	Gly	Thr	Pro	Gly	Gln
1				5				10						15	
Arg	Val	Thr	Ile	Ser	Cys										
			20												

<210> 224

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-17, -33 VL FR1 (aa)

<400> 224

Gln	Pro	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Lys
1				5				10						15	
Thr	Ala	Met	Ile	Thr	Cys										
			20												

<210> 225

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 VL FR1 (aa)

<400> 225

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

20

<210> 226
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-20, -27 VL FR1 (aa)

<400> 226
 Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
 1 5 10 15
 Arg Val Thr Ile Ser Cys
 20

<210> 227
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-22, -23, -40 VL FR1 (aa)

<400> 227
 Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Ser Ile Thr Ile Ser Cys
 20

<210> 228
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>

354246_1.txt

<223> BCMA-13, -14, -15, -16, -18, -21 VL FR2 (aa)

<400> 228

Trp	Tyr	Gln	Gln	Ile	Pro	Gly	Thr	Ala	Pro	Lys	Leu	Leu	Ile	Tyr
1				5					10					15

<210> 229

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-17, -33 VL FR2 (aa)

<400> 229

Trp	Tyr	Gln	Gln	Lys	Thr	Gly	Gln	Ala	Pro	Val	Leu	Val	Val	Tyr
1				5					10					15

<210> 230

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 VL FR2 (aa)

<400> 230

Trp	Tyr	Gln	Gln	His	Pro	Gly	Lys	Asp	Pro	Lys	Leu	Met	Ile	Phe
1				5					10					15

<210> 231

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20, -27 VL FR2 (aa)

<400> 231

Trp	Phe	Arg	Gln	Val	Pro	Gly	Thr	Ala	Pro	Gln	Leu	Leu	Ile	Tyr
1				5					10					15

<210> 232

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-22, -23, -40 VL FR2 (aa)

<400> 232

Trp	Tyr	Gln	Gln	Pro	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Ile	Ile	Tyr
1				5					10					15

<210> 233

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13 VL FR3 (aa)

<400> 233

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

<210> 234

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-14 VL FR3 (aa)

<400> 234

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

<210> 235

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-15 VL FR3 (aa)

<400> 235

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

<210> 236

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 VL FR3 (aa)

<400> 236

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

<210> 237

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

<220>
 <223> Synthetic

<220>
 <223> BCMA-17, -33 VL FR3 (aa)

<400> 237
 Gly Ile Pro Glu Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr
 1 5 10 15
 Leu Thr Ile Ser Arg Val Glu Ala Gly Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 238
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-18 VL FR3 (aa)

<400> 238
 Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser
 1 5 10 15
 Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 239
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-19 VL FR3 (aa)

<400> 239
 Gly Val Ser Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser

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1 5 10 15
 Leu Asp Ile Ser Gly Leu Gln Pro Glu Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 240
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-20, -27 VL FR3 (aa)

<400> 240
 Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Ser Ser Ala Ser
 1 5 10 15
 Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Tyr Tyr Tyr Cys
 20 25 30

<210> 241
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-21 VL FR3 (aa)

<400> 241
 Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Ile Ser Ala Ser
 1 5 10 15
 Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 242
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>

<223> BCMA-22, -23, -40 VL FR3 (aa)

<400> 242

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

<210> 243

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13 VL FR4 (aa)

<400> 243

Phe	Gly	Gly	Gly	Thr	Lys	Val	Thr	Val	Leu
1				5					10

<210> 244

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 VL FR4 (aa)

<400> 244

Ile	Gly	Thr	Gly	Thr	Lys	Val	Thr	Val	Leu
1				5					10

<210> 245

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20, -27 VL FR4 (aa)

<400> 245

Phe	Gly	Gly	Glu	Thr	Lys	Leu	Thr	Val	Leu
1				5					10

<210> 246

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-21, -22, -23 VL FR4 (aa)

<400> 246

Phe	Gly	Thr	Gly	Thr	Lys	Val	Thr	Val	Leu
1				5					10

<210> 247

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13 VH Chain (aa)

<400> 247

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

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65		70		75		80									
Leu	Gln	Met	Asn	Ser	Leu	Lys	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85						90					95	
Ala	Thr	Leu	Pro	Gly	Arg	Asp	Gly	Tyr	Pro	Gly	Ala	Phe	Asp	Tyr	Arg
			100					105					110		
Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser						
		115					120								

<210> 248
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-14 VH Chain (aa)

<400>	248														
Glu	Val	Gln	Leu	Leu	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	Ser	Tyr
			20					25					30		
Gly	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			
Ala	Val	Ile	Ser	Tyr	Asp	Gly	Ser	Asn	Lys	Tyr	Tyr	Ala	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	Thr	Leu	Pro	Gly	Arg	Asp	Gly	Tyr	Pro	Gly	Ala	Phe	Asp	Tyr	Arg
			100					105					110		
Gly	Pro	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser						
		115					120								

<210> 249
 <211> 123
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>

<223> BCMA-15 VH Chain (aa)

<400> 249

```

Gln Val Gln Leu Leu 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 Ser Tyr
      20           25           30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35           40           45
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala 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 Lys Asp Gln Tyr Ser Ser Ser Ala Gln Arg Ala Asp Phe Asp Tyr
      100          105          110
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
      115           120

```

<210> 250

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 VH Chain (aa)

<400> 250

```

Glu Val Gln Leu Val Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Thr
 1           5           10           15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Thr Phe Thr Ser Ser
      20           25           30
Ala Met Gln Trp Val Arg Gln Ala Arg Gly Gln Arg Leu Glu Trp Ile
      35           40           45
Gly Trp Ile Val Val Gly Ser Gly Asn Thr Asn Tyr Ala Gln Lys Phe
      50           55           60
Gln Glu Arg Val Thr Ile Thr Arg Asp Met 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 Ala Ala Pro Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Leu Trp Gly
      100          105          110
Gln Gly Thr Leu Val Thr Val Ser Ser

```

115

120

<210> 251
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-17 VH Chain (aa)

<400> 251
 Gln Val Gln Leu Val Gln 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Leu Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95
 Ala Arg Glu Ala Asp Ser Ser Ala Asp Tyr Trp Gly Gln Gly Thr Leu
 100 105 110
 Val Asn Val Ser Ser
 115

<210> 252
 <211> 115
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-18 VH Chain (aa)

<400> 252
 Glu Val Gln Leu Leu 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 Ser Ser Tyr

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```

      20      25      30
Trp Met Ser Trp His Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
      35      40      45
Ala His Ile Asn Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val
      50      55      60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Ser Ser 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 Trp Leu Ala Val Thr Asn Trp Gly Gln Gly Thr Leu Val Thr
      100      105      110
Val Ser Ser
      115

```

<210> 253
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-19 VH Chain (aa)

```

<400> 253
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
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
      35      40      45
Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
      50      55      60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
      65      70      75      80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Asp Gly Gly Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val
      100      105      110
Ser Ser

```

<210> 254
 <211> 121
 <212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20 VH Chain (aa)

<400> 254

```

Glu Val Gln Leu Leu 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 Asp 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 Gly 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 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 Gly Gly Leu Gly Ile Thr Pro Tyr Tyr Phe Asp Tyr Trp Gly
      100          105          110
Gln Gly Thr Leu Val Thr Val Ser Ser
      115          120

```

<210> 255

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-21 VH Chain (aa)

<400> 255

```

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1           5           10           15
Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr
      20           25           30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35           40           45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val
      50           55           60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr

```

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```

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 Val Asp Gly Gly Tyr Thr Glu Asp Tyr Trp Gly Gln Gly Thr
          100         105         110
Leu Val Thr Val Ser Ser
          115

```

<210> 256
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-22, -23, -40 VH Chain (aa)

```

<400> 256
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 Asp Tyr
          20          25          30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35          40          45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
          85          90          95
Ala Lys Val Asp Gly Asp Tyr Thr Glu Asp Tyr Trp Gly Gln Gly Thr
          100         105         110
Leu Val Thr Val Ser Ser
          115

```

<210> 257
 <211> 111
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>

<223> BCMA-13 VL Chain (aa)

<400> 257

```

Gln Ala Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
 1           5           10           15
Arg Val Thr Ile Ser Cys Ser Gly Ser Gly Ser Asn Ile Gly Ser Asn
      20           25           30
Asp Val Ser Trp Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu
      35           40           45
Ile Tyr Trp Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
      50           55           60
Ala Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg
65           70           75           80
Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
      85           90           95
Gly Gly Ser Trp Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu
      100          105          110

```

<210> 258

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-14 VL Chain (aa)

<400> 258

```

Gln Ala Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
 1           5           10           15
Arg Val Thr Ile Ser Cys Ser Gly Ser Gly Ser Asn Ile Gly Ser Asn
      20           25           30
Asp Val Ser Trp Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu
      35           40           45
Ile Tyr Trp Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
      50           55           60
Gly Ser Lys Ser Gly Ala Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65           70           75           80
Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Arg Leu
      85           90           95
Asn Gly Phe Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
      100          105          110

```

<210> 259

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

<220>
 <223> Synthetic

<220>
 <223> BCMA-15 VL Chain (aa)

<400> 259
 Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
 1 5 10 15
 Arg Val Thr Ile Ser Cys Ser Gly Ser Gly Ser Asn Ile Gly Ser Asn
 20 25 30
 Asp Val Ser Trp Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45
 Ile Tyr Trp Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
 50 55 60
 Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Val Ile Ser Gly Leu Arg
 65 70 75 80
 Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
 85 90 95
 Ser Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 260
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-16 VL Chain (aa)

<400> 260
 Gln Ser Ala Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
 1 5 10 15
 Arg Val Thr Ile Ser Cys Ser Gly Ser Gly Ser Asn Ile Gly Ser Asn
 20 25 30
 Asp Val Ser Trp Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45
 Ile Tyr Trp Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
 50 55 60
 Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln

354246_1.txt

65		70		75		80									
Ser	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Ala	Ser	Trp	Asp	Asp	Ser	Leu
		85		90		95									
Ser	Gly	Trp	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu		
		100						105					110		

<210> 261
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-17, -33 VL Chain (aa)

<400> 261
Gln Pro Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
1 5 10 15
Thr Ala Met Ile Thr Cys Gly Gly Asn Asn Ile Gly Phe Lys Gly Val
20 25 30
Gln Trp Tyr Gln Gln Lys Thr Gly Gln Ala Pro Val Leu Val Val Tyr
35 40 45
Asp Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
50 55 60
Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
65 70 75 80
Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ala Ser Asp His
85 90 95
Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 262
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-18 VL Chain (aa)

<400> 262
Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln

354246_1.txt

1	5	10	15
Arg Val Thr Ile Ser Cys Ser Gly Ser Gly Ser Asn Ile Gly Ser Asn			
20	25	30	
Asp Val Ser Trp Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu			
35	40	45	
Ile Tyr Trp Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser			
50	55	60	
Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg			
65	70	75	80
Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu			
85	90	95	
Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu			
100	105	110	

<210> 263

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 VL Chain (aa)

<400> 263

Gln Ala Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln			
1	5	10	15
Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Asp Tyr			
20	25	30	
Asn Tyr Val Ala Trp Tyr Gln Gln His Pro Gly Lys Asp Pro Lys Leu			
35	40	45	
Met Ile Phe Glu Val Ile Asn Arg Pro Ser Gly Val Ser Asp Arg Phe			
50	55	60	
Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Asp Ile Ser Gly Leu			
65	70	75	80
Gln Pro Glu Asp Glu Ala Asp Tyr Tyr Cys Ile Ser Tyr Ser Arg Gly			
85	90	95	
Ser Thr Pro Tyr Val Ile Gly Thr Gly Thr Lys Val Thr Val Leu			
100	105	110	

<210> 264

<211> 104

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20, -27 VL Chain (aa)

<400> 264

```

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
 1           5           10          15
Arg Val Thr Ile Ser Cys Ser Gly Gly Lys Thr Val Asn Trp Phe Arg
          20           25           30
Gln Val Pro Gly Thr Ala Pro Gln Leu Leu Ile Tyr Ser Asn Asp Gln
          35           40           45
Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Ser
          50           55           60
Ser Ala Ser Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Tyr
65           70           75           80
Tyr Tyr Cys Gly Ser Trp Asp Asp Ser Leu Asn Ala Trp Val Phe Gly
          85           90           95
Gly Glu Thr Lys Leu Thr Val Leu
          100

```

<210> 265

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-21 VL Chain (aa)

<400> 265

```

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

```

100

105

110

<210> 266
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-22 VL Chain (aa)

<400> 266
 Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Ser Ile Thr Ile Ser Cys Thr Gly Ser Ser Ser Asp Val Gly Lys Tyr
 20 25 30
 Asn Leu Val Ser Trp Tyr Gln Gln Pro Pro Gly Lys Ala Pro Lys Leu
 35 40 45
 Ile Ile Tyr Asp Val Asn Lys Arg Pro Ser Gly Val Ser Asn Arg Phe
 50 55 60
 Ser Gly Ser Lys Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Gly Leu
 65 70 75 80
 Gln Gly Asp Asp Glu Ala Asp Tyr Tyr Cys Cys Ser Tyr Gly Gly Ser
 85 90 95
 Arg Ser Tyr Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu
 100 105 110

<210> 267
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-23 VL Chain (aa)

<400> 267
 Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Ser Ile Thr Ile Ser Cys Thr Gly Ser Ser Ser Asp Val Gly Lys Tyr
 20 25 30
 Asn Leu Val Ser Trp Tyr Gln Gln Pro Pro Gly Lys Ala Pro Lys Leu

354246_1.txt

```

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

```

<210> 268

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-13 scFv (aa)

<400> 268

```

Gln Met Gln Leu Val Gln Tyr 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 Ser Tyr
      20              25              30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35              40              45
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala 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 Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
      85              90              95
Ala Thr Leu Pro Gly Arg Asp Gly Tyr Pro Gly Ala Phe Asp Tyr Arg
      100              105              110
Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
      115              120              125
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Val Leu Thr Gln Pro
      130              135              140
Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser
  145              150              155              160
Gly Ser Gly Ser Asn Ile Gly Ser Asn Asp Val Ser Trp Tyr Gln Gln
      165              170              175
Ile Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Trp Asn Asp Gln Arg
      180              185              190
Pro Ser Gly Val Pro Asp Arg Phe Ser Ala Ser Lys Ser Gly Thr Ser

```

354246_1.txt

195	200	205
Ala Ser Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr		
210	215	220
Tyr Cys Ala Ala Trp Asp Asp Ser Leu Gly Gly Ser Trp Val Phe Gly		
225	230	235
Gly Gly Thr Lys Val Thr Val Leu		240
245		

<210> 269
 <211> 248
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-14 scFv (aa)

<400> 269

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg		
1	5	10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr		
20	25	30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val		
35	40	45
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala 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
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys		
85	90	95
Ala Thr Leu Pro Gly Arg Asp Gly Tyr Pro Gly Ala Phe Asp Tyr Arg		
100	105	110
Gly Pro Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly		
115	120	125
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Val Leu Thr Gln Pro		
130	135	140
Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser		
145	150	155
Gly Ser Gly Ser Asn Ile Gly Ser Asn Asp Val Ser Trp Tyr Gln Gln		
165	170	175
Ile Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Trp Asn Asp Gln Arg		
180	185	190
Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Ala Ser		
195	200	205
Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr		

354246_1.txt

210		215		220
Tyr Cys Ala Ala Trp Asp Asp Arg Leu Asn Gly Phe Trp Val Phe Gly				
225		230		235
Gly Gly Thr Lys Leu Thr Val Leu				240
	245			

<210> 270
 <211> 248
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-15 scFv (aa)

<400> 270

Gln Val Gln Leu Leu 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 Ser Tyr				
20	25	30		
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val				
35	40	45		
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala 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 Lys Asp Gln Tyr Ser Ser Ser Ala Gln Arg Ala Asp Phe Asp Tyr				
100	105	110		
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser				
115	120	125		
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln				
130	135	140		
Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys				
145	150	155	160	
Ser Gly Ser Gly Ser Asn Ile Gly Ser Asn Asp Val Ser Trp Tyr Gln				
165	170	175		
Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Trp Asn Asp Gln				
180	185	190		
Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr				
195	200	205		
Ser Ala Ser Leu Val Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp				
210	215	220		
Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Ser Gly Trp Val Phe Gly				

225 230 235 240
 Gly Gly Thr Lys Leu Thr Val Leu
 245

<210> 271
 <211> 246
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-16 scFv (aa)

<400> 271
 Glu Val Gln Leu Val Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Thr
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Thr Phe Thr Ser Ser
 20 25 30
 Ala Met Gln Trp Val Arg Gln Ala Arg Gly Gln Arg Leu Glu Trp Ile
 35 40 45
 Gly Trp Ile Val Val Gly Ser Gly Asn Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Glu Arg Val Thr Ile Thr Arg Asp Met 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 Ala Ala Pro Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Leu Trp Gly
 100 105 110
 Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
 115 120 125
 Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Ala Leu Thr Gln Pro Pro
 130 135 140
 Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly
 145 150 155 160
 Ser Gly Ser Asn Ile Gly Ser Asn Asp Val Ser Trp Tyr Gln Gln Ile
 165 170 175
 Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Trp Asn Asp Gln Arg Pro
 180 185 190
 Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala
 195 200 205
 Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr
 210 215 220
 Cys Ala Ser Trp Asp Asp Ser Leu Ser Gly Trp Val Phe Gly Gly Gly
 225 230 235 240
 Thr Lys Leu Thr Val Leu

245

<210> 272
 <211> 240
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-17 scFv (aa)

<400> 272
 Gln Val Gln Leu Val Gln 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Leu Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95
 Ala Arg Glu Ala Asp Ser Ser Ala Asp Tyr Trp Gly Gln Gly Thr Leu
 100 105 110
 Val Asn Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 115 120 125
 Gly Gly Gly Ser Gln Pro Val Leu Thr Gln Pro Pro Ser Val Ser Val
 130 135 140
 Ala Pro Gly Lys Thr Ala Met Ile Thr Cys Gly Gly Asn Asn Ile Gly
 145 150 155 160
 Phe Lys Gly Val Gln Trp Tyr Gln Gln Lys Thr Gly Gln Ala Pro Val
 165 170 175
 Leu Val Val Tyr Asp Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg
 180 185 190
 Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg
 195 200 205
 Val Glu Ala Gly Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser
 210 215 220
 Ala Ser Asp His Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 225 230 235 240

<210> 273

<211> 240
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-18 scFv (aa)

<400> 273
 Glu Val Gln Leu Leu 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 Ser Ser Tyr
 20 25 30
 Trp Met Ser Trp His Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
 35 40 45
 Ala His Ile Asn Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Ser Ser 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 Trp Leu Ala Val Thr Asn Trp Gly Gln Gly Thr Leu Val Thr
 100 105 110
 Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125
 Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro
 130 135 140
 Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Gly Ser Asn Ile Gly
 145 150 155 160
 Ser Asn Asp Val Ser Trp Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys
 165 170 175
 Leu Leu Ile Tyr Trp Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg
 180 185 190
 Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly
 195 200 205
 Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp
 210 215 220
 Ser Leu Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 225 230 235 240

<210> 274
 <211> 240
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 scFv (aa)

<400> 274

```

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
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
          35           40           45
Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
          50           55           60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65           70           75           80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
          85           90           95
Ala Arg Asp Gly Gly Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val
          100          105          110
Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
          115          120          125
Ser Gln Ala Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly
          130          135          140
Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Asp
145          150          155          160
Tyr Asn Tyr Val Ala Trp Tyr Gln Gln His Pro Gly Lys Asp Pro Lys
          165          170          175
Leu Met Ile Phe Glu Val Ile Asn Arg Pro Ser Gly Val Ser Asp Arg
          180          185          190
Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Asp Ile Ser Gly
          195          200          205
Leu Gln Pro Glu Asp Glu Ala Asp Tyr Tyr Cys Ile Ser Tyr Ser Arg
          210          215          220
Gly Ser Thr Pro Tyr Val Ile Gly Thr Gly Thr Lys Val Thr Val Leu
225          230          235          240

```

<210> 275

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20 scFv (aa)

<400> 275

```

Glu Val Gln Leu Leu 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 Asp 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 Gly 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 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 Gly Gly Leu Gly Ile Thr Pro Tyr Tyr Phe Asp Tyr Trp Gly
 100          105          110
Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
 115          120          125
Gly Gly Ser Gly Gly Gly Gly Ser Gln Pro Val Leu Thr Gln Pro Pro
 130          135          140
Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly
 145          150          155          160
Gly Lys Thr Val Asn Trp Phe Arg Gln Val Pro Gly Thr Ala Pro Gln
 165          170          175
Leu Leu Ile Tyr Ser Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg
 180          185          190
Phe Ser Gly Ser Lys Ser Gly Ser Ser Ala Ser Leu Asp Ile Ser Gly
 195          200          205
Leu Gln Ser Glu Asp Glu Ala Tyr Tyr Tyr Cys Gly Ser Trp Asp Asp
 210          215          220
Ser Leu Asn Ala Trp Val Phe Gly Gly Glu Thr Lys Leu Thr Val Leu
 225          230          235          240

```

<210> 276

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-21 scFv (aa)

<400> 276

```

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly

```

354246_1.txt

```

1           5           10           15
Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr
20           25           30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35           40           45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
85           90           95
Ala Lys Val Asp Gly Gly Tyr Thr Glu Asp Tyr Trp Gly Gln Gly Thr
100          105          110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115          120          125
Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser
130          135          140
Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Gly Ser
145          150          155          160
Asn Ile Gly Ser Asn Asp Val Ser Trp Tyr Gln Gln Ile Pro Gly Thr
165          170          175
Ala Pro Lys Leu Leu Ile Tyr Trp Asn Asp Gln Arg Pro Ser Gly Val
180          185          190
Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Ile Ser Ala Ser Leu Ala
195          200          205
Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala
210          215          220
Trp Asp Asp Ser Leu Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Val
225          230          235          240
Thr Val Leu

```

<210> 277

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-22 scFv (aa)

<400> 277

```

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 Asp Tyr

```

354246_1.txt

```

      20      25      30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35      40      45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
      85      90      95
Ala Lys Val Asp Gly Asp Tyr Thr Glu Asp Tyr Trp Gly Gln Gly Thr
      100      105      110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
      115      120      125
Gly Gly Gly Gly Ser Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser
      130      135      140
Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Ser Ser Ser
145      150      155      160
Asp Val Gly Lys Tyr Asn Leu Val Ser Trp Tyr Gln Gln Pro Pro Gly
      165      170      175
Lys Ala Pro Lys Leu Ile Ile Tyr Asp Val Asn Lys Arg Pro Ser Gly
      180      185      190
Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Thr Leu
      195      200      205
Thr Ile Ser Gly Leu Gln Gly Asp Asp Glu Ala Asp Tyr Tyr Cys Cys
      210      215      220
Ser Tyr Gly Gly Ser Arg Ser Tyr Val Phe Gly Thr Gly Thr Lys Val
225      230      235      240
Thr Val Leu

```

<210> 278

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-23 scFv (aa)

<400> 278

```

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 Asp Tyr
      20      25      30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

```

354246_1.txt

```

      35      40      45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
      85      90      95
Ala Lys Val Asp Gly Asp Tyr Thr Glu Asp Tyr Trp Gly Gln Gly Thr
  100      105      110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
  115      120      125
Gly Gly Gly Gly Ser Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser
  130      135      140
Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Ser Ser Ser
  145      150      155      160
Asp Val Gly Lys Tyr Asn Leu Val Ser Trp Tyr Gln Gln Pro Pro Gly
      165      170      175
Lys Ala Pro Lys Leu Ile Ile Tyr Asp Val Asn Lys Arg Pro Ser Gly
      180      185      190
Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Thr Leu
      195      200      205
Thr Ile Ser Gly Leu Gln Gly Asp Asp Glu Ala Asp Tyr Tyr Cys Ser
      210      215      220
Ser Tyr Gly Gly Ser Arg Ser Tyr Val Phe Gly Thr Gly Thr Lys Val
  225      230      235      240
Thr Val Leu

```

<210> 279

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> VH-3 CDR-H3 (aa)

<400> 279

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Val Asp Gly Asp Asp Ala Phe Asp Ile
  1          5

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<210> 280

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> VH-4 CDR-H3 (aa)

<400> 280

Asp	Pro	Leu	Ser	Trp	Asp	Ser	Ser	Gly	Lys	Gly	Pro	Arg
1				5					10			

<210> 281

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> VH-5 CDR-H3 (aa)

<400> 281

Glu	Asn	Tyr	Asp	Phe	Trp	Ser	Trp	Arg	Tyr	Tyr	Tyr	Asp	Met	Asp	Val
1				5				10						15	

<210> 282

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> VH-6 CDR-H3 (aa)

<400> 282

Val	Asp	Gly	Pro	Pro	Ser	Tyr	Asp	Ile
1				5				

<210> 283

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> VH-7 CDR-H3 (aa)

<400> 283

Gly Asp Trp Asp Asp Ala Phe Asp Ile
1 5

<210> 284

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> VH-9 CDR-H3 (aa)

<400> 284

Val Asp Gly Asp Tyr Glu Asp Tyr
1 5

<210> 285

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> VH-10 CDR-H3 (aa)

<400> 285

Asp Val Pro Ser Ser Gly Asp Asp Ala Phe Asp Ile
1 5 10

<210> 286

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> VH-11 CDR-H3 (aa)

<400> 286

Val Asp Gly Asp Asp Val Phe Asp Ile
1 5

<210> 287

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> VH-12 CDR-H3 (aa)

<400> 287

Val Asp Gly Asp Ala Phe Asp Ile
1 5

<210> 288

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C1 VH CDR-H1 (aa)

<400> 288

Asp Tyr Ser Ile Asn
1 5

<210> 289

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C2 VH CDR-H1 (aa)

<400> 289

Asn Phe Gly Met Asn

1

5

<210> 290

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C1 VH CDR-H2 (aa)

<400> 290

Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe Arg

1

5

10

15

Gly

<210> 291

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C2 VH CDR-H2 (aa)

<400> 291

Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe Lys

1

5

10

15

Gly

<210> 292
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VH CDR-H3 (aa)

<400> 292
 Asp Tyr Ser Tyr Ala Met Asp Tyr
 1 5

<210> 293
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VH CDR-H3 (aa)

<400> 293
 Gly Glu Ile Tyr Tyr Gly Tyr Asp Gly Gly Phe Ala Tyr
 1 5 10

<210> 294
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VH CDR-H1 (aa) Chothia numbering

<400> 294
 Gly Tyr Thr Phe Thr Asp Tyr
 1 5

<210> 295
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VH CDR-H1 (aa) Chothia numbering

<400> 295
 Gly Tyr Thr Phe Thr Asn Phe
 1 5

<210> 296
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VH CDR-H2 (aa) Chothia numbering

<400> 296
 Asn Thr Glu Thr Arg Glu
 1 5

<210> 297
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VH CDR-H2 (aa) Chothia numbering

<400> 297
 Asn Thr Tyr Thr Gly Glu
 1 5

<210> 298
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VH CDR-H1 (aa) AbM numbering

<400> 298
 Gly Tyr Thr Phe Thr Asp Tyr Ser Ile Asn
 1 5 10

<210> 299
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VH CDR-H1 (aa) AbM numbering

<400> 299
 Gly Tyr Thr Phe Thr Asn Phe Gly Met Asn
 1 5 10

<210> 300
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VH CDR-H2 (aa) AbM numbering

<400> 300
 Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala
 1 5 10

<210> 301
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VH CDR-H2 (aa) AbM numbering

<400> 301
 Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr
 1 5 10

<210> 302
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VL CDR-L1 (aa)

<400> 302
 Arg Ala Ser Glu Ser Val Thr Ile Leu Gly Ser His Leu Ile His
 1 5 10 15

<210> 303
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VL CDR-L1 (aa)

<400> 303
 Arg Ala Ser Gln Asp Val Asn Thr Ala Val Ser
 1 5 10

<210> 304
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VL CDR-L2 (aa)

<400> 304
 Leu Ala Ser Asn Val Gln Thr
 1 5

<210> 305
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VL CDR-L2 (aa)

<400> 305
 Ser Ala Ser Tyr Arg Tyr Thr
 1 5

<210> 306
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VL CDR-L3 (aa)

<400> 306
 Leu Gln Ser Arg Thr Ile Pro Arg Thr
 1 5

<210> 307
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VL CDR-L3 (aa)

<400> 307
 Gln Gln His Tyr Ser Thr Pro Trp Thr
 1 5

<210> 308
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VH FR1 (aa)

<400> 308
 Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
 1 5 10 15
 Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
 20 25 30

<210> 309
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VH FR1 (aa)

<400> 309
 Gln Ile Gln Leu Val Gln Ser Gly Pro Asp Leu Lys Lys Pro Gly Glu

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1 5 10 15
Thr Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
20 25 30

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<210> 310
<211> 14
<212> PRT
<213> Artificial Sequence
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<220>
<223> Synthetic

<220>
<223> BCMA-C1 VH FR2 (aa)

<400> 310
Trp Val Lys Arg Ala Pro Gly Lys Gly Leu Lys Trp Met Gly
1 5 10

```
<210> 311
<211> 14
<212> PRT
<213> Artificial Sequence
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<220>
<223> Synthetic

<220>
<223> BCMA-C2 VH FR2 (aa)

<400> 311
Trp Val Lys Gln Ala Pro Gly Lys Gly Phe Lys Trp Met Ala
1 5 10

```
<210> 312
<211> 32
<212> PRT
<213> Artificial Sequence
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<220>
<223> Synthetic

<220>
<223> BCMA-C1 VH FR3 (aa)

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<400> 312

Arg	Phe	Ala	Phe	Ser	Leu	Glu	Thr	Ser	Ala	Ser	Thr	Ala	Tyr	Leu	Gln
1				5					10					15	
Ile	Asn	Asn	Leu	Lys	Tyr	Glu	Asp	Thr	Ala	Thr	Tyr	Phe	Cys	Ala	Leu
			20					25					30		

<210> 313

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C2 VH FR3 (aa)

<400> 313

Arg	Phe	Ala	Phe	Ser	Val	Glu	Thr	Ser	Ala	Thr	Thr	Ala	Tyr	Leu	Gln
1				5					10					15	
Ile	Asn	Asn	Leu	Lys	Thr	Glu	Asp	Thr	Ala	Thr	Tyr	Phe	Cys	Ala	Arg
			20					25					30		

<210> 314

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C1 VH FR4 (aa)

<400> 314

Trp	Gly	Gln	Gly	Thr	Ser	Val	Thr	Val	Ser	Ser
1				5					10	

<210> 315

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C2 VH FR4 (aa)

<400> 315

Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ala
1				5					10	

<210> 316

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C1 VL FR1 (aa)

<400> 316

Asp	Ile	Val	Leu	Thr	Gln	Ser	Pro	Pro	Ser	Leu	Ala	Met	Ser	Leu	Gly
1				5					10					15	
Lys	Arg	Ala	Thr	Ile	Ser	Cys									
				20											

<210> 317

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C2 VL FR1 (aa)

<400> 317

Asp	Val	Val	Met	Thr	Gln	Ser	His	Arg	Phe	Met	Ser	Thr	Ser	Val	Gly
1				5					10					15	
Asp	Arg	Val	Ser	Ile	Thr	Cys									
				20											

<210> 318

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C1 VL FR2 (aa)

<400> 318

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro	Thr	Leu	Leu	Ile	Gln
1				5				10						15

<210> 319

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C2 VL FR2 (aa)

<400> 319

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ser	Pro	Lys	Leu	Leu	Ile	Phe
1				5				10						15

<210> 320

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C1 VL FR3 (aa)

<400> 320

Gly	Val	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Arg	Thr	Asp	Phe	Thr
1				5				10						15	
Leu	Thr	Ile	Asp	Pro	Val	Glu	Glu	Asp	Asp	Val	Ala	Val	Tyr	Tyr	Cys
			20					25					30		

<210> 321

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

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VL FR3 (aa)

<400> 321
 Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Ala Asp Phe Thr
 1 5 10 15
 Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys
 20 25 30

<210> 322
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VL FR4 (aa)

<400> 322
 Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 1 5 10

<210> 323
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VL FR4 (aa)

<400> 323
 Phe Gly Gly Gly Thr Lys Leu Asp Ile Lys
 1 5 10

<210> 324
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VH Chain (aa)

<400> 324
 Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
 1 5 10 15
 Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
 20 25 30
 Ser Ile Asn Trp Val Lys Arg Ala Pro Gly Lys Gly Leu Lys Trp Met
 35 40 45
 Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe
 50 55 60
 Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala Thr Tyr Phe Cys
 85 90 95
 Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
 100 105 110
 Val Thr Val Ser Ser
 115

<210> 325
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C2 VH Chain (aa)

<400> 325
 Gln Ile Gln Leu Val Gln Ser Gly Pro Asp Leu Lys Lys Pro Gly Glu
 1 5 10 15
 Thr Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Phe
 20 25 30
 Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Phe Lys Trp Met

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```

      35              40              45
Ala Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe
      50              55              60
Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Thr Thr Ala Tyr
65              70              75              80
Leu Gln Ile Asn Asn Leu Lys Thr Glu Asp Thr Ala Thr Tyr Phe Cys
      85              90              95
Ala Arg Gly Glu Ile Tyr Tyr Gly Tyr Asp Gly Gly Phe Ala Tyr Trp
      100              105              110
Gly Gln Gly Thr Leu Val Thr Val Ser Ala
      115              120

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<210> 326
 <211> 111
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-C1 VL Chain (aa)

```

<400> 326
Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala Met Ser Leu Gly
  1              5              10              15
Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Thr Ile Leu
      20              25              30
Gly Ser His Leu Ile His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
      35              40              45
Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr Gly Val Pro Ala
      50              55              60
Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Asp
65              70              75              80
Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys Leu Gln Ser Arg
      85              90              95
Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
      100              105              110

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<210> 327
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>

<223> BCMA-C2 VL Chain (aa)

<400> 327

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Asp Val Val Met Thr Gln Ser His Arg Phe Met Ser Thr Ser Val Gly
 1           5           10           15
Asp Arg Val Ser Ile Thr Cys Arg Ala Ser Gln Asp Val Asn Thr Ala
 20           25           30
Val Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
 35           40           45
Phe Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
 50           55           60
Ser Gly Ser Gly Ala Asp Phe Thr Leu Thr Ile Ser Ser Val Gln Ala
 65           70           75           80
Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln His Tyr Ser Thr Pro Trp
 85           90           95
Thr Phe Gly Gly Gly Thr Lys Leu Asp Ile Lys
100           105

```

<210> 328

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C1 VL-VH scFv (aa)

<400> 328

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Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala Met Ser Leu Gly
 1           5           10           15
Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Thr Ile Leu
 20           25           30
Gly Ser His Leu Ile His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
 35           40           45
Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr Gly Val Pro Ala
 50           55           60
Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Asp
 65           70           75           80
Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys Leu Gln Ser Arg
 85           90           95
Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Gly
100           105           110
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile

```

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```

      115              120              125
Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu Thr Val
      130              135              140
Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr Ser Ile
145              150              155              160
Asn Trp Val Lys Arg Ala Pro Gly Lys Gly Leu Lys Trp Met Gly Trp
      165              170              175
Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe Arg Gly
      180              185              190
Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr Leu Gln
      195              200              205
Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala Thr Tyr Phe Cys Ala Leu
      210              215              220
Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr
225              230              235              240
Val Ser Ser

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<210> 329

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C2 VH-VL scFv (aa)

<400> 329

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Gln Ile Gln Leu Val Gln Ser Gly Pro Asp Leu Lys Lys Pro Gly Glu
 1              5              10              15
Thr Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Phe
      20              25              30
Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Phe Lys Trp Met
      35              40              45
Ala Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe
      50              55              60
Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Thr Thr Ala Tyr
65              70              75              80
Leu Gln Ile Asn Asn Leu Lys Thr Glu Asp Thr Ala Thr Tyr Phe Cys
      85              90              95
Ala Arg Gly Glu Ile Tyr Tyr Gly Tyr Asp Gly Gly Phe Ala Tyr Trp
      100              105              110
Gly Gln Gly Thr Leu Val Thr Val Ser Ala Gly Gly Gly Gly Ser Gly
      115              120              125
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser

```

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130	135	140													
His	Arg	Phe	Met	Ser	Thr	Ser	Val	Gly	Asp	Arg	Val	Ser	Ile	Thr	Cys
145					150					155					160
Arg	Ala	Ser	Gln	Asp	Val	Asn	Thr	Ala	Val	Ser	Trp	Tyr	Gln	Gln	Lys
			165						170					175	
Pro	Gly	Gln	Ser	Pro	Lys	Leu	Leu	Ile	Phe	Ser	Ala	Ser	Tyr	Arg	Tyr
		180						185					190		
Thr	Gly	Val	Pro	Asp	Arg	Phe	Thr	Gly	Ser	Gly	Ser	Gly	Ala	Asp	Phe
	195						200				205				
Thr	Leu	Thr	Ile	Ser	Ser	Val	Gln	Ala	Glu	Asp	Leu	Ala	Val	Tyr	Tyr
	210					215				220					
Cys	Gln	Gln	His	Tyr	Ser	Thr	Pro	Trp	Thr	Phe	Gly	Gly	Gly	Thr	Lys
225					230					235					240
Leu	Asp	Ile	Lys												

<210> 330
 <211> 738
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-1 scFv (nt)

<400> 330
 caggtgcagc tgggtgcagtc tgggggaggc ttggtacagc cagggcggtc cctgagactc 60
 tcctgtacag cttctggatt cacctttggt gattatgcta tgagctgggt ccgccaggct 120
 ccaggggaagg ggctggagtg ggtaggtttc attagaagca aagcttatgg tgggacaaca 180
 gaatacgccg cgtctgtgaa aggcagattc accatctcaa gagatgattc caaaagcatc 240
 gcctatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtgcggcc 300
 tggagtgcc cgaactgacta ctggggccag ggaaccctgg tcaccgtctc ctcaggtgga 360
 ggcgggttcag gcggaggtgg ctctggcggg ggccggatcgg atattgtgat gaccaggtct 420
 ccagactccc tgtctgtgtc tccgggcgag agggccacca tcagctgcaa gtccagccag 480
 agtgttttat ccacctccaa caataagaac tatttagctt ggtatcagca gaaaccagga 540
 cagcccccta ggctgctcct ttactgggca tctaccggg aggccggggg ccctgaccga 600
 ttcagtggca gcgggtcttg gacagatttc actctacca tcagcagcct gcaggctgaa 660
 gatgtggcgg tttattactg tcaacaatat ttcagttctc cgtacacttt tggccacggg 720
 accaagctgg aaatcaaa 738

<210> 331
 <211> 717
 <212> DNA
 <213> Artificial Sequence

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<220>

<223> Synthetic

<220>

<223> BCMA-2 scFv (nt)

<400> 331

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gaggtgcagc tgggtggagtc tggggggaggc ttggtcaagc ctggagggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgagctggat ccgccaggct 120
ccagggaagg ggctggagtg ggtttcatat attagtagta gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaagaa ctcactgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gaaagtggat 300
ggccctcctt cttctgatat ctggggccaa gggacaatgg tcaccgtctc ctcaggtgga 360
ggcggttcag gcgagggtgg ctctggcggg ggcggatcgg aaatagtgat gacgcagtct 420
ccagccaccc tgtctgtgtc tccaggggaa acagccaccc tctcctgcag ggccagtcag 480
agtattaaga ccaacttggc ctggtaccag cagaaacctg gccaggctcc caggctcctc 540
atctatgctg catccaccag ggccactggc atcccagaca gattcagtgg cagtgggtct 600
gggacagact tcactctcac catcaccaga ctggagcctg aagattttgc agtgtattac 660
tgtcagcaat atggtagctc acccactttt ggccggggga ccaagctgga aatcaaaa 717
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<210> 332

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-3 scFv (nt)

<400> 332

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caggtgcagc tgggtgcagtc tggggggaggc ttggtacagc cagggcgggtc cctgagactc 60
tcctgtacag cttctggatt cacctttggt gattatgcta tgagctgggt ccgccaggct 120
ccagggaagg ggctggagtg ggtaggtttc attagaagca aagcttatgg tgggacaaca 180
gaatacgccg cgtctgtgaa aggcagattc accatctcaa gagatgattc caaaaagcatc 240
gcctatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtgcggcc 300
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ggcggttcag gcgagggtgg ctctggcggg ggcggatcgg atattgtgat gaccagctct 420
ccagactccc tggttgtgtc tctgggcgag agggccacca tcaactgcaa gtccagccag 480
agtgttttac acagctccaa caataagaat tacttagctt ggtaccagca gaaaccagga 540
cagctccta agctgtcat ttactgggca tctaccggg aatccggggg ccctgaccgg 600
ttcagtggca gcggtctgag gacagatttc actctacca tcagcagcct gcaggctgaa 660
gatgtggcag tttattactg tcagcagtat tatactactc cgctcacttt cggcggaggg 720
accaaggtgg aaatcaaaa 738
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<210> 333

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-4 scFv (nt)

<400> 333

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caggtgcagc tgggtgcagtc tgggggaggc ttggtacagc cagggcggtc cctgagactc 60
tcctgtacag cttctggatt cacctttggt gattatgcta tgagctgggt ccgccaggct 120
ccagggaagg ggctggagtg ggtaggtttc attagaagca aagcttatgg tgggacaaca 180
gaatacgccg cgtctgtgaa aggcagattc accatctcaa gagatgattc caaaagcatc 240
gcctatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtgcggcc 300
tggagtgtccc cgactgacta ctggggccag ggaaccctgg tcaccgtctc ctcaggtgga 360
ggcggttcag gcggaggtgg ctctggcggg ggccggtcgg ccatccggat gaccagttct 420
ccatcctccc tgtccgcgtc tctgggggac agagtcacca tcaactgccg ggcgagtcag 480
gacattagga attctttggc ctggtatcag cagaggccag ggaaagcccc taaactcctg 540
ctttctgctg catccagatt ggaaagtggg gtcccttcta ggttcagtgg cactacttct 600
ggggcggagt atgctctcag catcagcagc ctgcagcctg aagatgtcgc atcttatttc 660
tgtcagcagt attatagtct ccctctctcc ttcggcggag ggaccaaggt ggaaatcaaa 720

```

<210> 334

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-5 scFv (nt)

<400> 334

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caggtgcagc tgggtgcagtc tgggggaggc ttggtacagc cagggcggtc cctgagactc 60
tcctgtacag cttctggatt cacctttggt gattatgcta tgagctgggt ccgccaggct 120
ccagggaagg ggctggagtg ggtaggtttc attagaagca aagcttatgg tgggacaaca 180
gaatacgccg cgtctgtgaa aggcagattc accatctcaa gagatgattc caaaagcatc 240
gcctatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtgcggcc 300
tggagtgtccc cgactgacta ctggggccag ggaaccctgg tcaccgtctc ctcaggtgga 360
ggcggttcag gcggaggtgg ctctggcggg ggccggtcgg acatcgtgat gaccagttct 420
ccagactccc tggctgtgtc tctgggcgag agggccacca tcaactgcaa gtccagccag 480
agtgttttat acagctccaa caataagaac tacttagctt ggtaccagca gaaaccagga 540
cagcctccta agctgtcat ttactgggca tctaccggg aatccggggg ccctgaccga 600
ttcagtggca gcgggtcttg gacagatttc actctcacca tcagcagcct gcaggctgaa 660
gatgtggcag tttattactg tcagcaatat tatagtactc cgtggacgtt cggccaaggg 720

```

accaaggtgg atatcaaa

738

<210> 335

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-6 scFv (nt)

<400> 335

```

caggtgcagc tgggtgcagtc tgggggaggc ttggtacagc cagggcggtc cctgagactc 60
tcctgtacag cttctggatt cacctttggt gattatgcta tgagctgggt ccgccaggct 120
ccagggaagg ggctggagtg ggtaggtttc attagaagca aagcttatgg tgggacaaca 180
gaatacgccg cgtctgtgaa aggagattc accatctcaa gagatgattc caaaagcatc 240
gcctatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtgcggcc 300
tggagtgtcc cgactgacta ctggggccag ggaaccctgg tcaccgtctc ctcagggtgga 360
ggcggttcag gcgaggtgg ctctggcggg ggcggatcgg atattgtgat gaccagtcct 420
ccatcgtccc tgtctgtgtc tgtaggagag agagtcacca tcacttgtcg ggcgagtcag 480
tctataagta attccttagc ctggtataaa cagagaccgg gagaagcccc taaactcctg 540
atacatgctg catccaatgt ggaagatggg gtcccttcga gggtcagcgg caggggatct 600
gggacagttt tactctcgc catcagcaat gtacagcctg aagatttcgc aacttactac 660
tgtcagcaga gtcacatgta ccctccgact ttcggcgggg ggaccaaggt ggaaatcaaa 720

```

<210> 336

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-7 scFv (nt)

<400> 336

```

caggtgcagc tgggtgcagtc tgggggaggc ttggtacagc cagggcggtc cctgagactc 60
tcctgtacag cttctggatt cacctttggt gattatgcta tgagctgggt ccgccaggct 120
ccagggaagg ggctggagtg ggtaggtttc attagaagca aagcttatgg tgggacaaca 180
gaatacgccg cgtctgtgaa aggagattc accatctcaa gagatgattc caaaagcatc 240
gcctatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtgcggcc 300
tggagtgtcc cgactgacta ctggggccag ggaaccctgg tcaccgtctc ctcagggtgga 360
ggcggttcag gcgaggtgg ctctggcggg ggcggatcgg tcatccagtt gaccagtcct 420
ccctcctcac tgtctgcatc tgtaggggag agagtcacca tcacttgtcg ggcgagtcag 480

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354246_1.txt

gacattggcg attatthtagc ctggtttcag cagagaccag ggaaagcccc taagtccctg 540
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gggacacact tcactctcac catcaacagc ctgcagcctg aagattttgc aacttattac 660
tgccaacagt atcatagtca cccgtggacg ttcggcccag ggaccaaggt ggatatcaaa 720

<210> 337

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-8 scFv (nt)

<400> 337

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ccagggaagg ggctggagtg ggtaggtttc attagaagca aagcttatgg tgggacaaca 180
gaatacgccg cgtctgtgaa aggcagattc accatctcaa gagatgattc caaaaagcatc 240
gcctatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtgcggcc 300
tggagtgtccc cgactgacta ctggggccag ggaaccctgg tcaccgtctc ctcagggtgga 360
ggcgggtcag gcgagggtgg ctctggcggt ggcggatcgg atattgtgat gacccagtct 420
ccagactccc tggctgtgtc tctgggcgag agggccacca tcaactgcaa gtccagccag 480
agtgttttat acagctccaa caataagaac tacttagctt ggtaccagca gaaaccagga 540
cagcttccta agctgtcat ttactgggca tctaccggg aatccggggc ccctgaccga 600
ttcagtggca gcggtcttgg gacagatttc actctcacca tcagcagcct gcaggctgaa 660
gatgtggcag tttattactg tcagcaatat tatagtactc cgtacacttt tggccagggg 720
accaagctgg aaatcaaa 738

<210> 338

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-9 scFv (nt)

<400> 338

gaagtgcagc tgggtgcagtc tggggggaggc ttggtcaagc ctggagggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgagctggat ccgccaggct 120
ccagggaagg ggctggagtg ggtttcatac attagtagta gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaagaa ctcactgtat 240

354246_1.txt

```

ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gagagtggac 300
ggtgactacg tcgatgacta ctggggccag ggaaccctgg tcaccgtctc ctcaggtgga 360
ggcggttcag gcgagggtgg ctctggcggg ggccggatcgt cctatgagct gactcagccg 420
ccctcgggtgt ctgtggcccc aggacagacg gccagggtta cctgtggggc aaataatatt 480
ggaagcaaaa gtgtccactg gtaccagcag aagccaggcc aggcccccat gctggtcgtc 540
tatgatgatg acgaccggcc ctccgggatc cctgagcgat tctctggctc caactctggg 600
aacacggcca ccctgaccat cagcgggggtc gagggccgggg atgaggccga ctacttctgt 660
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cta 723

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<210> 339
 <211> 723
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-10 scFv (nt)

```

<400> 339
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tcctgtgcag cctctggatt caccttcagt gactactaca tgagctggat ccgccaggct 120
ccagggaagg ggctggagtg ggtttcatac attagtagta gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaagaa ctcactgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gagagtggac 300
ggtgactacg tcgatgacta ctggggccag ggaaccctgg tcaccgtctc ctcaggtgga 360
ggcggttcag gcgagggtgg ctctggcggg ggccggatcgt cctatgagct gactcagccg 420
ccctcgggtgt ctgtggcccc aggacagacg gccagggtta cctgtggggc aaataatatt 480
ggaagcaaaa gtgtccactg gtaccagcag aagccaggcc aggcccccat gctggtcgtc 540
tatgatgatg acgaccggcc ctccgggatc cctgagcgat tctctggctc caactctggg 600
aacacggcca ccctgaccat cagcgggggtc gagggccgggg atgaggccga ctacttctgt 660
cacgtgtggg atagaagtcg tgatcattat gtcttcggaa ctgggacca gctgaccgtc 720
cta 723

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<210> 340
 <211> 741
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-11 scFv (nt)

<400> 340

354246_1.txt

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tcctgtgcag cctctggatt cacctttgat gattatgcc a tgactgggt ccggcgagct 120
ccagggaagg gcctggagtg ggtctcaggc attagttaga atagtggtag cataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccgtgt attactgtgc gagagatctg 300
gggcccgaact acgatcccga tgcttttgat atctggggcc aagggacaat ggtcaccgtt 360
tcctcagggtg gaggcgggttc aggcggaggc ggctctggcg gtggcggatc gcagcttggtg 420
ctgactcagc caccctcagc gtctgggacc cccgggcaga gggtcaccat ctcttgttct 480
ggaagcagct ccaacatcgg aagtaatgct gtaaactggc accagcagct cccaggaacg 540
gccccgaag tcctcatcta taatagtcac cagcgccct caggggtccc tgaccgattc 600
tctggctcca agtctggcac ctcagcctcc ctggccatca atgggctcca gtctgaggac 660
gaggctgatt attactgtgc agcatgggat gacagcctga gaggttacgt cttcgggaact 720
gggaccaagc tcaccgtcct a 741
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<210> 341

<211> 729

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-12 scFv (nt)

<400> 341

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gaggtgcagc tgggtggagtc tggggggaggc ttggtcaagc ctggagggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgagctggat ccgccaggct 120
ccagggaagg ggctggagtg ggtttcatal attagtagta gtgtagtagc catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaagaa ctactgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gaaagtggat 300
ggccctcctt cttttgatat ctggggccaa gggacaatgg tcaccgtctc ctcagggtgga 360
ggcgggttcag gcggagggtgg ctctggcggc ggcggatcgc agtctgccct gacgcagccg 420
ccctcagtgat ctgcggcccc aggacagaag gtcaccatct cctgctctgg aagccgctcc 480
aacattggga ataattatgt atcctggtac caacagctcc cagggaacagc ccccaaactc 540
ctcatttatg acaatgctaa gcgaccctca ggaattcctg accgattctc tggctccaag 600
tctggcacgt cagccaccct ggacatcgcc ggactccaga ctggggatga ggccgactat 660
tactgtcagg tgtgggatag tagtagtgat cattgggtat tcggcggagg gaccaagctc 720
accgtccta 729
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<210> 342

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

354246_1.txt

<220>

<223> BCMA-13 scFv (nt)

<400> 342

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tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt cccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactac 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgaa agctgaggac acggctgtgt attactgtgc taccctaccc 300
ggtagagatg gctaccccgg agcctttgac tacaggggcc aggggaaccct ggtcaccgtc 360
tcctcagggtg gaggcgggttc aggcggagggt ggctctggcg gtggcggatc gcaggctgtg 420
ctgactcagc caccctcagc gtctgggacc cccgggcaga gggtcaccat ctcttggttct 480
ggaagcggct ccaacatcgg aagtaatgat gtctcctggg atcagcagat cccaggaacg 540
gccccaaac tcctcatcta ctggaatgat cagcggccct caggggtccc tgaccgattc 600
tctgcctcca agtctggcac ctcagcctcc ctggccatca gtgggctccg gtccgaggat 660
gaggctgatt attactgtgc agcatgggat gacagcctgg gtggttcttg ggtgttcggc 720
ggagggacca aggtcaccgt ccta 744
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<210> 343

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-14 scFv (nt)

<400> 343

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tcctgtgcag cgtctggatt caccttcagt agctatggca tgcactgggt cccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactac 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc taccctaccc 300
ggtagagatg gctaccccgg agcctttgac tacaggggcc cgggaaccct ggtcaccgtc 360
tcctcagggtg gaggcgggttc aggcggagggt ggctctggcg gtggcggatc gcaggctgtg 420
ctgactcagc caccctcagc gtctgggacc cccgggcaga gggtcaccat ctcttggttct 480
ggaagcggct ccaacatcgg aagtaatgat gtctcctggg atcagcagat cccaggaacg 540
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tctggctcca agtctggcgc ctcagcctct ctggccatca gtgggctcca gtctgaggat 660
gaggctgatt attattgtgc agcatgggat gacagggtga acggtttttg ggtgttcggc 720
ggagggacca agctcaccgt ccta 744
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<210> 344

<211> 744

<212> DNA

<213> Artificial Sequence

354246_1.txt

<220>

<223> Synthetic

<220>

<223> BCMA-15 scFv (nt)

<400> 344

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ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gaaagatcag 300
tatagcagta gcgcacaaag ggccgacttt gactactggg gccagggaac cctggtcacc 360
gtctcctcag gtggaggcgg ttcaggcgga ggtggttctg gcggtggcgg atcgcagtct 420
gtgctgacgc agccaccctc agcgtctggg acccccgggc agagggtcac catctcttgt 480
tctggaagcg gctccaacat cggaagtaat gatgtctcct ggtatcagca gatcccagga 540
acggccccc aactcctcat ctactggaat gatcagcggc cctcaggggt ccctgaccgg 600
ttctcaggct ccaagtctgg cacctcagcc tccctgggtc tcagtgggct ccgggtccgag 660
gatgaggctg attattactg tgcagcatgg gatgacagcc tgagtgggtg ggtgttcggc 720
ggagggacca agctgaccgt ccta 744
```

<210> 345

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-16 scFv (nt)

<400> 345

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tcctgcaagg cttctggatt cacctttact agctctgcta tgcagtgggt gcgacaggct 120
cgtggacaac gccttgagtg gataggatgg atcgtcgttg gcagtggtaa cacaaactac 180
gcacagaagt tccaggaaaag agtcaccatt accagggaca tgtccacaag cacagcctac 240
atggagctga gcagcctgag atccgaggac acggccgtgt attactgtgc ggagctccg 300
tattacgata ttttgactgg ttattattta tggggccagg gaacgctggc caccgtctcc 360
tcagggtggag gcggttctgg cggagggtggc tctggcggtg gcggtatcga gtctgccctg 420
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agcggctcca acatcggaag taatgatgtc tcctggatc agcagatccc aggaacggcc 540
cccaaactcc tcatctactg gaatgatcag cgccctcag ggtccctga ccgattctct 600
ggctccaagt ctggcacctc agcctccctg gccatcagtg ggctccagtc tgaggatgag 660
gctgattatt actgtgcatc atgggatgac agcctgagtg gttgggtgtt cggcggaggg 720
accaagctga ccgtccta 738
```

354246_1.txt

<210> 346
<211> 720
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-17 scFv (nt)

<400> 346
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ccagggaagg ggctggagtg ggtttcatac attagtagta gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaagaa ctactgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gagagaggcc 300
gatagtagcg ctgactactg gggccaggga accctgggtca acgtctcctc aggtggaggc 360
ggttcaggcg gaggtggctc tggcgggtggc ggatcgcagc ctgtgctgac tcagccaccc 420
tcgggtgtcag tggccccagg aaagacggcc atgattacct gtgggggaaa caacattgga 480
tttaaagggtg tgcagtggta ccagcagaag acaggccagg cccctgtgct ggtcgtctat 540
gatgatagcg accggccctc agggatccct gagcgattct ctggctccaa ctctgggaac 600
acggccaccc tgaccatcag cagggtcgaa gccggggatg aggccgatta ttactgtcag 660
gtgtgggata gtgctagtga tcattgggtg ttcggcggag ggaccaagct gaccgtccta 720

<210> 347
<211> 720
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-18 scFv (nt)

<400> 347
gaggttcagc tgttggagtc tgggggaggc ttggtccagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt cacgtttagt agctattgga tgagctggca ccgccaggct 120
ccagggaagg ggccggagtg ggtggcccac ataaaccaag acggaagtga gaagtactat 180
gtggactctg tgaagggccg attcaccatc tccagagaca acgccgagag ttactgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gaggtggctg 300
gcggttacta actggggcca gggaaccctg gtcaccgtct cctcaggtagg aggcgggttca 360
ggcggagggtg gctctggcgg tggcggatcg cagtctgtgt tgactcagcc accctcagcg 420
tctgggaccc ccgggcagag ggtcaccatc tcttgttctg gaagcggctc caacatcgga 480
agtaatgatg tctcctggta tcagcagatc ccaggggacgg cccccaaact cctcatctac 540
tggaatgatc agcggccctc aggggtccct gaccgattct ctggctccaa gtctggcacc 600

354246_1.txt

tcagcctccc tggccatcag tgggctccgg tccgaggatg aggctgatta ttactgtgca 660
gcatgggatg acagcctgaa tggttgggtg ttcggcggag ggaccaagct gaccgtccta 720

<210> 348

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-19 scFv (nt)

<400> 348

cagggtccagc tgggtacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaagg cttctggata caccttcacc agctactata tgcactgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg atcaacccta acagtgggtg cacaaactat 180
gcacagaagt ttcagggcag ggtcacatg accagggaca cgtccatcag cacagcctac 240
atggagctga gcaggctgag atctgacgac acggccgtgt attactgtgc gagagatggg 300
ggggacgtct gggggccaagg gaccacggtc accgtctcct cagggtggagg cggttcaggc 360
ggagggtggc ctggcgggtg cggatcgag gctgtgctga ctcagcctgc ctccgtgtct 420
gggtctcctg gacagtcgat caccatctcc tgcactggaa ccagcagtga cgttggtgat 480
tataactatg tcgcctggta tcaacaacac ccaggcaaag accccaaact catgattttt 540
gaggtcatta atcgccctc aggggtttct gatcgcttct ctggctccaa gtctggcaac 600
acggcctccc tggacatctc tgggctccag cctgaggacg aggctgatta ttactgcatc 660
tcattattcac gaggcagcac tccttatgtc atcggaactg ggaccaaggt gaccgtccta 720

<210> 349

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-20 scFv (nt)

<400> 349

gaggtgcagc tgttgagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatgccca tgcactgggt ccggcaagct 120
ccagggaagg gccttgagtg ggtctcaggc attagttaga atagtggtag cataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aaaggggggc 300
ctaggaataa ccccatacta ctttgactac tggggccagg gaaccctggt caccgtctcc 360

354246_1.txt

```
tcagggtggag gcggttcagg cggagggtggc tctggcgggtg gcggatcgca gcctgtgctg 420
actcagccac cctcagcgtc tgggaccccc gggcagaggg tcaccatctc ttgttcggga 480
ggcaagactg taaactgggtt ccggcagggtc ccagggaacgg ccccccaact cctcatctat 540
agtaatgatc agcggccctc aggggtccct gaccgattct ctggctccaa gtctggctcc 600
tcagcctccc tggacatcag tgggctccag tctgaggatg aggcttatta ttactgtgga 660
tcatgggatg acagcctcaa tgcttgggtg ttcggcggag agaccaagct gaccgtccta 720
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<210> 350

<211> 729

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-21 scFv (nt)

<400> 350

```
gaagtgcagc tgggtggagtc tgggggaggc ttggtcaagc ctggagggtc cctgaaactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgagctggat ccgccaggct 120
ccagggaagg ggctggagtg ggtttcatat attagtagta gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaagaa ctcactgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gaaagtagac 300
ggaggctaca cagaggacta ctggggccag ggaaccctgg tcaccgtctc ctcagggtgga 360
ggcgggtcag gcggagggtg ctctggcggg ggcggatcgc agtctgtgct gactcagcca 420
ccctcagcgt ctgggacccc cgggcagagg gtcaccatct cttgttctgg aagcggctcc 480
aacatcgga gtaatgatgt ctctgggtat cagcagatcc cagggaacggc ccccaaactc 540
ctcatctact ggaatgatca gcggccctca ggggtccctg accggttctc aggctccaag 600
tctggcatct cagcctccct ggccatcagc gggctccggg ccgaggatga ggctgattat 660
tactgtgcag catgggatga cagcctgaat gggttatgtct tcggaactgg gaccaaggct 720
accgtccta 729
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<210> 351

<211> 729

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-22 scFv (nt)

<400> 351

```
gaagtgcagc tgggtggagtc tgggggaggc ttggtcaagc ctggagggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgagctggat ccgccaggct 120
```

354246_1.txt

```

ccagggaagg ggctggagtg ggtttcatac attagtagta gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaaca acgccaagaa ctactgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gaaagtagac 300
ggagactaca cagaggacta ctggggccag ggaaccctgg tcaccgtctc ctcagggtga 360
ggcggttcag gcggagggtg ctctggcggg ggccggatcgc agtctgccct gactcagcct 420
gcctccgtgt ctgggtctcc tggacagtcg atcactatct cctgcactgg aagcagcagt 480
gatgttggca aatataatct tgtctcctgg taccaacagc cccaggcaa agcccccaag 540
ctcataattt atgacgtcaa taagcggccc tcagggggtt ctaatcgctt ctctggctcc 600
aagtctggca acacggccac cctgacaatc tctgggctcc aggggtgacga cgaggctgat 660
tattattgtt gctcatatgg aggtagtagg tcttatgtct tcggaactgg gaccaagggtg 720
accgtccta 729

```

<210> 352

<211> 729

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-23 scFv (nt)

<400> 352

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gaagtgcagc tgggtggagtc tgggggaggc ttggtcaagc ctggagggtc cctgagactc 60
tcctgtgcag cctctggatt caccctcagt gactactaca tgagctggat ccgccaggct 120
ccagggaagg ggctggagtg ggtttcatac attagtagta gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaaca acgccaagaa ctactgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gaaagtagac 300
ggagactaca cagaggacta ctggggccag ggaaccctgg tcaccgtctc ctcagggtga 360
ggcggttcag gcggagggtg ctctggcggg ggccggatcgc agtctgccct gactcagcct 420
gcctccgtgt ctgggtctcc tggacagtcg atcactatct cctgcactgg aagcagcagt 480
gatgttggca aatataatct tgtctcctgg taccaacagc cccaggcaa agcccccaag 540
ctcataattt atgacgtcaa taagcggccc tcagggggtt ctaatcgctt ctctggctcc 600
aagtctggca acacggccac cctgacaatc tctgggctcc aggggtgacga cgaggctgat 660
tattattgta gctcatatgg aggtagtagg tcttatgtct tcggaactgg gaccaagggtg 720
accgtccta 729

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<210> 353

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> Consensus CDR-H1

<220>
<221> VARIANT
<222> 1
<223> Xaa = D or S

<220>
<221> VARIANT
<222> 2
<223> Xaa = Y or S

<220>
<221> VARIANT
<222> 3
<223> Xaa = A, G, W or Y

<220>
<221> VARIANT
<222> 5
<223> Xaa = H, Q or S

<400> 353
Xaa Xaa Xaa Met Xaa
1 5

<210> 354
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> Consensus CDR-H2

<220>
<221> VARIANT
<222> 1
<223> Xaa = F, G, H, V, W or Y

<220>
<221> VARIANT
<222> 3
<223> Xaa = N, R, S or V

<220>

<221> VARIANT
<222> 4
<223> Xaa = P, Q, S, V, W or Y

<220>
<221> VARIANT
<222> 5
<223> Xaa = K or null

<220>
<221> VARIANT
<222> 6
<223> Xaa = A or null

<220>
<221> VARIANT
<222> 7
<223> Xaa = D, G, N, S, or Y

<220>
<221> VARIANT
<222> 8
<223> Xaa = G or S

<220>
<221> VARIANT
<222> 9
<223> Xaa = G or S

<220>
<221> VARIANT
<222> 10
<223> Xaa = E, G, N, T or S

<220>
<221> VARIANT
<222> 11
<223> Xaa = I, K, or T

<220>
<221> VARIANT
<222> 12
<223> Xaa = E, G, N or Y

<220>
<221> VARIANT
<222> 14
<223> Xaa = A or V

<220>

<221> VARIANT

<222> 15

<223> Xaa = A, D or Q

<220>

<221> VARIANT

<222> 16

<223> Xaa = K or S

<220>

<221> VARIANT

<222> 17

<223> Xaa = F or V

<220>

<221> VARIANT

<222> 18

<223> Xaa = K or Q

<220>

<221> VARIANT

<222> 19

<223> Xaa = E or G

<400> 354

Xaa Ile Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa

1

5

10

15

Xaa Xaa Xaa

<210> 355

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> Consensus CDR-H3

<220>

<221> VARIANT

<222> 1

<223> Xaa = A, D, E, G, L, V or W

<220>
<221> VARIANT
<222> 2
<223> Xaa = A, D, G, L, P, Q or S

<220>
<221> VARIANT
<222> 3
<223> Xaa = A, D, G, L or Y

<220>
<221> VARIANT
<222> 4
<223> Xaa = D, G, P, R, S, V, Y or null

<220>
<221> VARIANT
<222> 5
<223> Xaa = D, I, P, S, T, Y or null

<220>
<221> VARIANT
<222> 6
<223> Xaa = A, G, I, S, T, V, Y or null

<220>
<221> VARIANT
<222> 7
<223> Xaa = A, D, E, F, L, P, S, Y or null

<220>
<221> VARIANT
<222> 8
<223> Xaa = P, Q, T, Y or null

<220>
<221> VARIANT
<222> 9
<223> Xaa = D, G, R, Y or null

<220>
<221> VARIANT
<222> 10
<223> Xaa = A, F, Y or null

<220>
<221> VARIANT

<222> 11
 <223> Xaa = D, F or null

<220>
 <221> VARIANT
 <222> 12
 <223> Xaa = F or null

<220>
 <221> VARIANT
 <222> 13
 <223> Xaa = D, T or Y

<220>
 <221> VARIANT
 <222> 14
 <223> Xaa = I, L, N, V or Y

<400> 355
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10

<210> 356
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> Consensus CDR-L1

<220>
 <221> VARIANT
 <222> 1
 <223> Xaa = G, K, R, S or T

<220>
 <221> VARIANT
 <222> 2
 <223> Xaa = A, G or S

<220>
 <221> VARIANT
 <222> 3
 <223> Xaa = G, N, S or T

<220>
<221> VARIANT
<222> 4
<223> Xaa = G, K, N, Q, R or S

<220>
<221> VARIANT
<222> 5
<223> Xaa = S or null

<220>
<221> VARIANT
<222> 6
<223> Xaa = D, N, V or null

<220>
<221> VARIANT
<222> 7
<223> Xaa = L, V or null

<220>
<221> VARIANT
<222> 8
<223> Xaa = H, S, Y or null

<220>
<221> VARIANT
<222> 9
<223> Xaa = S, T or null

<220>
<221> VARIANT
<222> 10
<223> Xaa = S or null

<220>
<221> VARIANT
<222> 11
<223> Xaa = D, G, I, N, S or null

<220>
<221> VARIANT
<222> 12
<223> Xaa = D, E, G, K, I, N or null

<220>
<221> VARIANT

<222> 13

<223> Xaa = F, G, K, N, R, S, Y or null

<220>

<221> VARIANT

<222> 14

<223> Xaa = D, K, N, T or null

<220>

<221> VARIANT

<222> 15

<223> Xaa = A, D, G, L, N, S, T or Y

<220>

<221> VARIANT

<222> 16

<223> Xaa = L or V

<220>

<221> VARIANT

<222> 17

<223> Xaa = A, H, N, Q or S

<400> 356

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

1

5

10

15

Xaa

<210> 357

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> Consensus CDR-L2

<220>

<221> VARIANT

<222> 1

<223> Xaa = A, D, E, N, S, V or W

<220>

<221> VARIANT

<222> 2

<223> Xaa = A, D, N, S or V

<220>

<221> VARIANT

<222> 3

<223> Xaa = A, D, H, I, N or S

<220>

<221> VARIANT

<222> 4

<223> Xaa = D, K, N, Q, R or T

<220>

<221> VARIANT

<222> 5

<223> Xaa = L, R or V

<220>

<221> VARIANT

<222> 6

<223> Xaa = A, E, P or Q

<220>

<221> VARIANT

<222> 7

<223> Xaa = A, D, S or T

<400> 357

Xaa Xaa Xaa Xaa Xaa Xaa Xaa

1

5

<210> 358

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> Consensus CDR-L3

<220>

<221> VARIANT

<222> 1

<223> Xaa = A, C, G, H, I, Q or S

<220>
<221> VARIANT
<222> 2
<223> Xaa = A, Q, S or V

<220>
<221> VARIANT
<222> 3
<223> Xaa = S, W or Y

<220>
<221> VARIANT
<222> 4
<223> Xaa = D, F, G, H or Y

<220>
<221> VARIANT
<222> 5
<223> Xaa = D, G, M, R, S or T

<220>
<221> VARIANT
<222> 6
<223> Xaa = A, G, H, L, R, S, T or Y

<220>
<221> VARIANT
<222> 7
<223> Xaa = L, P, R, S or null

<220>
<221> VARIANT
<222> 8
<223> Xaa = D, G, N, R, S, T or null

<220>
<221> VARIANT
<222> 9
<223> Xaa = A, G, H, L, P or null

<220>
<221> VARIANT
<222> 10
<223> Xaa = F, S or null

<220>
<221> VARIANT

<222> 11

<223> Xaa = L, P, W or Y

<220>

<221> VARIANT

<222> 12

<223> Xaa = S, T or V

<400> 358

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
1				5								10

<210> 359

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> 4GS linker (aa)

<400> 359

Gly	Gly	Gly	Gly	Ser
1				5

<210> 360

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> 3GS linker (aa)

<400> 360

Gly	Gly	Gly	Ser
1			

<210> 361

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> (4GS)3 linker (aa)

<400> 361

Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser
1				5					10					15

<210> 362

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> Linker (aa)

<400> 362

Gly	Ser	Thr	Ser	Gly	Ser	Gly	Lys	Pro	Gly	Ser	Gly	Glu	Gly	Ser	Thr
1				5					10					15	
Lys	Gly														

<210> 363

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> Spacer (IgG4hinge) (aa)

<400> 363

Glu	Ser	Lys	Tyr	Gly	Pro	Pro	Cys	Pro	Pro	Cys	Pro
1				5					10		

<210> 364

<211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> Spacer (IgG4hinge) (nt)

<400> 364
 gaatctaagt acggaccgcc ctgccccct tgccct

36

<210> 365
 <211> 119
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> Hinge-CH3 spacer (aa)

<400> 365
 Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Gly Gln Pro Arg
 1 5 10 15
 Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys
 20 25 30
 Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
 35 40 45
 Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
 50 55 60
 Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
 65 70 75 80
 Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser
 85 90 95
 Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
 100 105 110
 Leu Ser Leu Ser Leu Gly Lys
 115

<210> 366
 <211> 229
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> Hinge-CH2-CH3 spacer (aa)

<400> 366

```

Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe
 1          5          10          15
Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
 20          25          30
Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
 35          40          45
Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val
 50          55          60
Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
 65          70          75          80
Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
 85          90          95
Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
100          105          110
Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
115          120          125
Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
130          135          140
Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
145          150          155          160
Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
165          170          175
Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu
180          185          190
Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
195          200          205
Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
210          215          220
Leu Ser Leu Gly Lys
225

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<210> 367

<211> 184

<212> PRT

<213> Homo sapiens

<220>

<223> Synthetic

<220>

<223> Human BCMA; GenBank No. BAB60895.1

<400> 367

```

Met Leu Gln Met Ala Gly Gln Cys Ser Gln Asn Glu Tyr Phe Asp Ser
 1             5             10             15
Leu Leu His Ala Cys Ile Pro Cys Gln Leu Arg Cys Ser Ser Asn Thr
 20             25             30
Pro Pro Leu Thr Cys Gln Arg Tyr Cys Asn Ala Ser Val Thr Asn Ser
 35             40             45
Val Lys Gly Thr Asn Ala Ile Leu Trp Thr Cys Leu Gly Leu Ser Leu
 50             55             60
Ile Ile Ser Leu Ala Val Phe Val Leu Met Phe Leu Leu Arg Lys Ile
 65             70             75             80
Ser Ser Glu Pro Leu Lys Asp Glu Phe Lys Asn Thr Gly Ser Gly Leu
 85             90             95
Leu Gly Met Ala Asn Ile Asp Leu Glu Lys Ser Arg Thr Gly Asp Glu
100            105            110
Ile Ile Leu Pro Arg Gly Leu Glu Tyr Thr Val Glu Glu Cys Thr Cys
115            120            125
Glu Asp Cys Ile Lys Ser Lys Pro Lys Val Asp Ser Asp His Cys Phe
130            135            140
Pro Leu Pro Ala Met Glu Glu Gly Ala Thr Ile Leu Val Thr Thr Lys
145            150            155            160
Thr Asn Asp Tyr Cys Lys Ser Leu Pro Ala Ala Leu Ser Ala Thr Glu
165            170            175
Ile Glu Lys Ser Ile Ser Ala Arg
180

```

<210> 368

<211> 184

<212> PRT

<213> Homo sapiens

<220>

<223> Human BCMA; NCBI No. NP_001183.2

<400> 368

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Met Leu Gln Met Ala Gly Gln Cys Ser Gln Asn Glu Tyr Phe Asp Ser
 1             5             10             15
Leu Leu His Ala Cys Ile Pro Cys Gln Leu Arg Cys Ser Ser Asn Thr
 20             25             30
Pro Pro Leu Thr Cys Gln Arg Tyr Cys Asn Ala Ser Val Thr Asn Ser
 35             40             45
Val Lys Gly Thr Asn Ala Ile Leu Trp Thr Cys Leu Gly Leu Ser Leu
 50             55             60
Ile Ile Ser Leu Ala Val Phe Val Leu Met Phe Leu Leu Arg Lys Ile
 65             70             75             80

```

354246_1.txt

```

Asn Ser Glu Pro Leu Lys Asp Glu Phe Lys Asn Thr Gly Ser Gly Leu
      85                      90                      95
Leu Gly Met Ala Asn Ile Asp Leu Glu Lys Ser Arg Thr Gly Asp Glu
      100                    105                    110
Ile Ile Leu Pro Arg Gly Leu Glu Tyr Thr Val Glu Glu Cys Thr Cys
      115                    120                    125
Glu Asp Cys Ile Lys Ser Lys Pro Lys Val Asp Ser Asp His Cys Phe
      130                    135                    140
Pro Leu Pro Ala Met Glu Glu Gly Ala Thr Ile Leu Val Thr Thr Lys
      145                    150                    155                    160
Thr Asn Asp Tyr Cys Lys Ser Leu Pro Ala Ala Leu Ser Ala Thr Glu
      165                    170                    175
Ile Glu Lys Ser Ile Ser Ala Arg
      180

```

<210> 369

<211> 135

<212> PRT

<213> Homo sapiens

<220>

<223> Human BCMA Variant; GenBank No. ABN42510.1

<400> 369

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Met Leu Gln Met Ala Gly Gln Cys Ser Gln Asn Glu Tyr Phe Asp Ser
  1                      5                      10                      15
Leu Leu His Ala Cys Ile Pro Cys Gln Leu Arg Cys Ser Ser Asn Thr
      20                    25                    30
Pro Pro Leu Thr Cys Gln Arg Tyr Cys Asn Ala Arg Ser Gly Leu Leu
      35                    40                    45
Gly Met Ala Asn Ile Asp Leu Glu Lys Ser Arg Thr Gly Asp Glu Ile
      50                    55                    60
Ile Leu Pro Arg Gly Leu Glu Tyr Thr Val Glu Glu Cys Thr Cys Glu
      65                    70                    75                    80
Asp Cys Ile Lys Ser Lys Pro Lys Val Asp Ser Asp His Cys Phe Pro
      85                    90                    95
Leu Pro Ala Met Glu Glu Gly Ala Thr Ile Leu Val Thr Thr Lys Thr
      100                    105                    110
Asn Asp Tyr Cys Lys Ser Leu Pro Ala Ala Leu Ser Ala Thr Glu Ile
      115                    120                    125
Glu Lys Ser Ile Ser Ala Arg
      130                    135

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<210> 370

<211> 185

<212> PRT

354246_1.txt

<213> Mus musculus

<220>

<223> Mouse BCMA; NCBI No. NP_035738.1

<400> 370

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Met Ala Gln Gln Cys Phe His Ser Glu Tyr Phe Asp Ser Leu Leu His
 1          5          10          15
Ala Cys Lys Pro Cys His Leu Arg Cys Ser Asn Pro Pro Ala Thr Cys
 20          25          30
Gln Pro Tyr Cys Asp Pro Ser Val Thr Ser Ser Val Lys Gly Thr Tyr
 35          40          45
Thr Val Leu Trp Ile Phe Leu Gly Leu Thr Leu Val Leu Ser Leu Ala
 50          55          60
Leu Phe Thr Ile Ser Phe Leu Leu Arg Lys Met Asn Pro Glu Ala Leu
 65          70          75          80
Lys Asp Glu Pro Gln Ser Pro Gly Gln Leu Asp Gly Ser Ala Gln Leu
 85          90          95
Asp Lys Ala Asp Thr Glu Leu Thr Arg Ile Arg Ala Gly Asp Asp Arg
100          105          110
Ile Phe Pro Arg Ser Leu Glu Tyr Thr Val Glu Glu Cys Thr Cys Glu
115          120          125
Asp Cys Val Lys Ser Lys Pro Lys Gly Asp Ser Asp His Phe Phe Pro
130          135          140
Leu Pro Ala Met Glu Glu Gly Ala Thr Ile Leu Val Thr Thr Lys Thr
145          150          155          160
Gly Asp Tyr Gly Lys Ser Ser Val Pro Thr Ala Leu Gln Ser Val Met
165          170          175
Gly Met Glu Lys Pro Thr His Thr Arg
180          185

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<210> 371

<211> 183

<212> PRT

<213> Macaca fascicular

<220>

<223> Cynomolgus BCMA; GenBank No. EHH60172.1

<400> 371

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Met Leu Gln Met Ala Arg Gln Cys Ser Gln Asn Glu Tyr Phe Asp Ser
 1          5          10          15
Leu Leu His Asp Cys Lys Pro Cys Gln Leu Arg Cys Ser Ser Thr Pro
 20          25          30
Pro Leu Thr Cys Gln Arg Tyr Cys Asn Ala Ser Met Thr Asn Ser Val
 35          40          45
Lys Gly Met Asn Ala Ile Leu Trp Thr Cys Leu Gly Leu Ser Leu Ile

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      50              55              60
Ile Ser Leu Ala Val Phe Val Leu Thr Phe Leu Leu Arg Lys Met Ser
65              70              75              80
Ser Glu Pro Leu Lys Asp Glu Phe Lys Asn Thr Gly Ser Gly Leu Leu
      85              90              95
Gly Met Ala Asn Ile Asp Leu Glu Lys Gly Arg Thr Gly Asp Glu Ile
      100             105             110
Val Leu Pro Arg Gly Leu Glu Tyr Thr Val Glu Glu Cys Thr Cys Glu
      115             120             125
Asp Cys Ile Lys Asn Lys Pro Lys Val Asp Ser Asp His Cys Phe Pro
      130             135             140
Leu Pro Ala Met Glu Glu Gly Ala Thr Ile Leu Val Thr Thr Lys Thr
145             150             155             160
Asn Asp Tyr Cys Asn Ser Leu Ser Ala Ala Leu Ser Val Thr Glu Ile
      165             170             175
Glu Lys Ser Ile Ser Ala Arg
      180

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<210> 372
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-28 CDR-H2 (aa) Kabat numbering

<220>
 <221> VARIANT
 <222> 10
 <223> Xaa = any amino acid

<400> 372
 Gly Ile Ser Trp Asn Ser Gly Ser Ile Xaa Tyr Ala Asp Ser Val Lys
 1 5 10 15
 Gly

<210> 373
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-33 CDR-H2 (aa) Kabat numbering

<400> 373

Tyr	Ile	Ser	Gly	Ser	Gly	Ser	Thr	Ile	Tyr	Tyr	Ala	Asp	Ser	Val	Lys
1				5					10					15	
Gly															

<210> 374

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-41 CDR-H2 Kabat numbering

<400> 374

Tyr	Ile	Ser	Ser	Ser	Gly	Asn	Thr	Ile	Tyr	Tyr	Ala	Asp	Ser	Val	Lys
1				5					10					15	
Gly															

<210> 375

<211> 7

<212> PRT

<213> Homo sapiens

<220>

<223> human BCMA epitope (residues 21-27)

<400> 375

Cys	Ile	Pro	Cys	Gln	Leu	Arg
1				5		

<210> 376

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-24, -28, -29, -39 CDR-H3 (aa)

<400> 376

Asp	Leu	Gly	Pro	Pro	Tyr	Gly	Asp	Asp	Ala	Phe	Asp	Ile
1				5					10			

<210> 377

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-30 CDR-H3 (aa)

<400> 377

Asp	Leu	Asp	Pro	Asp	Asp	Ala	Phe	Asp	Ile
1			5						10

<210> 378

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-35 CDR-H3 (aa)

<400> 378

Val	Asp	Gly	Asp	Tyr	Asp	Asp	Tyr
1			5				

<210> 379

<211> 10

<212> PRT

<213> Homo sapiens

<220>

<223> human BCMA epitope (residues 30-39)

<400> 379

Ser	Asn	Thr	Pro	Pro	Leu	Thr	Cys	Gln	Arg
1				5					10

<210> 380

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-25 CDR-L1 (aa)

<400> 380

Arg	Ala	Ser	Gln	Gly	Ile	Ser	Asn	Tyr	Leu	Ala
1				5						10

<210> 381

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-28 CDR-L1 (aa)

<400> 381

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

<210> 382

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-29 CDR-L1 (aa)

<400> 382

Thr Gly Thr Ser Ser Asp Val Gly Ser Tyr Asn Leu Val Ser
1 5 10

<210> 383

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-30 CDR-L1 (aa)

<400> 383

Arg Ala Ser Gln Pro Ile Arg Ser Asn Leu Ala
1 5 10

<210> 384

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-31 CDR-L1 (aa)

<400> 384

Lys Ser Ser Gln Ser Val Leu Asn Ser Ser Asn Asn Lys Asn Tyr Val
1 5 10 15
Ala

<210> 385

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-32 CDR-L1 (aa)

<400> 385

Gly Gly Asn Asn Ile Gly Ser Lys Gly Val His
1 5 10

<210> 386

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-34 CDR-L1 (aa)

<400> 386

Arg Ala Ser Gln Ser Ile Ser Asn Tyr Leu Ala
1 5 10

<210> 387

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-36 CDR-L1 (aa)

<400> 387

Gly Ser Ser Thr Gly Pro Val Thr Ser Ala His Ser Pro Ser
1 5 10

<210> 388

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-37, -38 CDR-L1 (aa)

<400> 388

Gly	Ser	Ser	Thr	Gly	Ala	Val	Thr	Asn	Gly	His	Ser	Pro	Tyr
1				5					10				

<210> 389

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-39 CDR-L1 (aa)

<220>

<221> VARIANT

<222> 11

<223> Xaa = any amino acid

<400> 389

Arg	Ala	Ser	Gln	Gly	Ile	Arg	Tyr	Glu	Leu	Xaa
1				5					10	

<210> 390

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-40 CDR-L1 (aa)

<400> 390

Thr	Gly	Ser	Ser	Ser	Asp	Val	Ser	Lys	Tyr	Asn	Leu	Val	Ser
1				5					10				

<210> 391

<211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-41 CDR-L1 (aa)

<400> 391
 Ser Gly Ser Ser Ser Asn Ile Gly Gly Asn Ser Val Asp
 1 5 10

<210> 392
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-42 CDR-L1 (aa)

<400> 392
 Arg Ala Ser Gln Gly Ile Gly Asn Gly Leu Ala
 1 5 10

<210> 393
 <211> 7
 <212> PRT
 <213> Homo sapiens

<220>
 <223> human BCMA epitope (residues 44-50)

<400> 393
 Ser Val Thr Asn Ser Val Lys
 1 5

<210> 394
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-44 CDR-L1 (aa)

<400> 394

Lys	Ser	Ser	Gln	Asn	Leu	Leu	Tyr	Ser	Ser	Asn	Asn	Lys	Asn	Tyr	Leu
1				5				10					15		
Ala															

<210> 395

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-45 CDR-L1 (aa)

<400> 395

Arg	Ala	Ser	Gln	Gly	Ile	Gly	Arg	Ser	Leu	Ala
1				5				10		

<210> 396

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-47, -48 CDR-L1 (aa)

<400> 396

Gly	Gly	Asn	Asn	Ile	Gly	Ser	Lys	Ser	Val	His
1				5				10		

<210> 397

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-49 CDR-L1 (aa)

<400> 397

Gly	Gly	Asp	Gln	Ile	Gly	Arg	Lys	Ser	Val	His
1				5					10	

<210> 398

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-51 CDR-L1 (aa)

<400> 398

Arg	Ala	Ser	Gln	Asn	Ile	Gly	Asp	Trp	Leu	Ala
1				5					10	

<210> 399

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-24 CDR-L2 (aa)

<400> 399

Trp	Gly	Ser	Thr	Arg	Glu	Ser
1			5			

<210> 400

<211> 7

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-25 CDR-L2 (aa)

<400> 400
Ser Ala Ser Thr Leu Gln Ser
1 5

<210> 401
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-28 CDR-L2 (aa)

<400> 401
Leu Gly Ser Asn Arg Ala Ser
1 5

<210> 402
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-29 CDR-L2 (aa)

<400> 402
Glu Val Ser Lys Arg Pro Ser
1 5

<210> 403
<211> 7

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-30 CDR-L2 (aa)

<400> 403
 Ser Ala Ser Thr Arg Ala Thr
 1 5

<210> 404
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-34 CDR-L2 (aa)

<400> 404
 Asp Ala Ser Asn Arg Ala Thr
 1 5

<210> 405
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-36 CDR-L2 (aa)

<400> 405
 Glu Thr Thr Asn Arg His Ser
 1 5

<210> 406
 <211> 7

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <220>
 <223> BCMA-37 CDR-L2 (aa)

 <400> 406
 Asp Thr Thr Asn Arg His Ser
 1 5

<210> 407
 <211> 7
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic

<220>
 <223> BCMA-38 CDR-L2 (aa)

 <400> 407
 Asp Thr Asn Asn Arg His Ser
 1 5

<210> 408
 <211> 7
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic

<220>
 <223> BCMA-39 CDR-L2 (aa)

 <400> 408
 Ala Ala Ser Thr Leu Gln Ser
 1 5

<210> 409
 <211> 7

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-41 CDR-L2 (aa)

<400> 409
Ala Asn Asp Arg Arg Pro Ser
1 5

<210> 410
<211> 7
<212> PRT
<213> Homo sapiens

<220>
<223> human BCMA epitope (residues 8-15)

<400> 410
Cys Ser Gln Asn Glu Tyr Phe
1 5

<210> 411
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-45 CDR-L2 (aa)

<400> 411
Asp Ala Ser Ser Leu Arg Ser
1 5

<210> 412
<211> 7
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-47, -48 CDR-L2 (aa)

<400> 412

Tyr	Asp	Thr	Asp	Arg	Pro	Ser
1				5		

<210> 413

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-49 CDR-L2 (aa)

<400> 413

Tyr	Asp	Ser	Asp	Arg	Pro	Ser
1				5		

<210> 414

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-51 CDR-L2 (aa)

<400> 414

Gly	Ala	Ser	Ile	Leu	Glu	Ser
1				5		

<210> 415

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-24 CDR-L3 (aa)

<400> 415

Gln Gln Tyr Ile Ser Leu Pro Trp Thr
1 5

<210> 416

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-25 CDR-L3 (aa)

<400> 416

Gln Gln Ser Tyr Thr Ser Arg Gln Thr
1 5

<210> 417

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-28 CDR-L3 (aa)

<400> 417

Met Gln Ala Leu Gln Thr Pro Pro Trp Thr
1 5 10

<210> 418

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-29 CDR-L3 (aa)

<400> 418

Cys	Ser	Tyr	Ala	Gly	Ser	Ser	Thr	Ser	Arg	Asp	Val
1				5					10		

<210> 419

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-30 CDR-L3 (aa)

<400> 419

Arg	His	Tyr	Ala	Pro	Leu	Thr
1				5		

<210> 420

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-34 CDR-L3 (aa)

<400> 420

Gln	Gln	Arg	Ser	Asn	Trp	Pro	Pro	Tyr	Thr
1				5				10	

<210> 421

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-26, -35 CDR-L3 (aa)

<400> 421

His	Leu	Trp	Asp	Arg	Ser	Arg	Asp	His	Tyr	Val
1				5					10	

<210> 422

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-36 CDR-L3 (aa)

<400> 422

Leu	Leu	Ser	Ser	Gly	Asp	Ala	Arg	Met	Val
1				5					10

<210> 423

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-37 CDR-L3 (aa)

<400> 423

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

<210> 424

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-38 CDR-L3 (aa)

<400> 424

Leu	Leu	Ser	Tyr	Ser	Asp	Ala	Arg	Leu	Ala
1				5				10	

<210> 425

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-39 CDR-L3 (aa)

<400> 425

Leu	Gln	His	Asn	Ser	Tyr	Pro	Leu	Thr
1				5				

<210> 426

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-41 CDR-L3 (aa)

<400> 426

Glu	Ser	Trp	Asp	Asp	Ala	Leu	Asn	Gly	His	Val
1				5				10		

<210> 427

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-42 CDR-L3 (aa)

<400> 427

Gln Gln Tyr Val Glu Asp Ala Leu Thr
1 5

<210> 428

<211> 11

<212> PRT

<213> Homo sapiens

<220>

<223> human BCMA epitope (residues 17-27)

<400> 428

Leu Leu His Ala Cys Ile Pro Cys Gln Leu Arg
1 5 10

<210> 429

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-44 CDR-L3 (aa)

<400> 429

Gln Gln Tyr Tyr Ser Ser Pro Tyr Thr
1 5

<210> 430

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-45 CDR-L3 (aa)

<400> 430

Gln Gln Leu Asn Gly Tyr Pro Trp Thr

1

5

<210> 431

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-47 CDR-L3 (aa)

<400> 431

Gln Leu Trp Asp Ser Asp Ser Asp Asp Phe Ala

1

5

10

<210> 432

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-49 CDR-L3 (aa)

<400> 432

Gln Val Trp Asp Ser Ser Thr Gly Gln Tyr Val Val

1

5

10

<210> 433

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-51 CDR-L3 (aa)

<400> 433

Gln Lys Tyr Asp Gly Ala Pro Pro Trp Thr

1

5

10

<210> 434

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-27 VH FR1 (aa)

<400> 434

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg

1

5

10

15

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

20

25

30

<210> 435

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-30 VH FR1 (aa)

<400> 435

Gln Val Gln Leu Val Gln 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 Gly

20

25

30

<210> 436

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-25, -31, -44, -51 VH FR1 (aa)

<400> 436

Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
1				5				10						15	
Ser	Leu	Arg	Leu	Ser	Cys	Thr	Ala	Ser	Gly	Phe	Thr	Phe	Gly		
			20					25					30		

<210> 437

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-32, -49 VH FR1 (aa)

<400> 437

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		
			20					25					30		

<210> 438

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-34 VH FR1 (aa)

<400> 438

Thr	Gly	Gln	Leu	Val	Gln	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	Asp		
			20					25					30		

<210> 439
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-42 VH FR1 (aa)

<400> 439
 Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly
 20 25 30

<210> 440
 <211> 746
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-52 scFv (nt)

<400> 440
 tcctatgagc tgactcagcc accctcagcg tctgggaccc ccgggcagag ggtcaccatg 60
 tcttgttctg gaaccagctc caacatcgga agtcactctg taaactggta ccagcagctc 120
 ccaggaacgg cccccaaact cctcatctat actaataatc agcggccctc aggggtccct 180
 gaccgattct ctggctccaa gtctggcacc tcagcctccc tggccatcag tggcctccag 240
 tctgaggatg aggctgatta ttactgtgca gcatgggatg gcagcctgaa tggctctggta 300
 ttcggcggag ggaccaagct gaccgtccta gggtctagag gtggtggtgg tagcggcggc 360
 ggcggctctg gtggtggtgg atccctcgag atggccgagg tgcagctggt gcagtctgga 420
 gcagagggtga aaaagcccgg ggagtctctg aagatctcct gtaagggttc tggatacagc 480
 tttaccagct actggatcgg ctgggtgcgc cagatgcccg ggaaaggcct ggagtggatg 540
 gggatcatct atcctgggtga ctctgatacc agatacagcc cgtccttcca aggccacgtc 600
 accatctcag ctgacaagtc catcagcact gcctacctgc agtggagcag cctgaaggcc 660
 tcggacaccg ccatgtatta ctgtgcgcgc tactctgggt ctttcgataa ctgggggtcaa 720
 ggtactctgg tgaccgtctc ctacgc 746

<210> 441

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

<220>
 <223> Synthetic

<220>
 <223> BCMA-37 VH FR3 (aa)

<400> 441
 Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1 5 10 15
 Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 442
 <211> 248
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-52 scFv (aa)

<400> 442
 Ser Tyr Glu Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
 1 5 10 15
 Arg Val Thr Met Ser Cys Ser Gly Thr Ser Ser Asn Ile Gly Ser His
 20 25 30
 Ser Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45
 Ile Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
 50 55 60
 Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
 65 70 75 80
 Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Gly Ser Leu
 85 90 95
 Asn Gly Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Ser
 100 105 110
 Arg Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115 120 125
 Leu Glu Met Ala Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys
 130 135 140
 Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser

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```

145          150          155          160
Phe Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly
          165          170          175
Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr
          180          185          190
Ser Pro Ser Phe Gln Gly His Val Thr Ile Ser Ala Asp Lys Ser Ile
          195          200          205
Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
          210          215          220
Met Tyr Tyr Cys Ala Arg Tyr Ser Gly Ser Phe Asp Asn Trp Gly Gln
225          230          235          240
Gly Thr Leu Val Thr Val Ser Ser
          245

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<210> 443
 <211> 32
 <212> PRT
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<220>
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<220>
 <223> BCMA-47 VH FR3 (aa)

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<400> 443
Asp Ser Pro Ser Pro Gly Thr Thr Pro Lys Asn Ser Leu Tyr Leu Gln
 1          5          10          15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys
          20          25          30

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<210> 444
 <211> 11
 <212> PRT
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<220>
 <223> Synthetic

<220>
 <223> BCMA-28 VH FR4 (aa)

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<400> 444
Gly Gly Gln Gly Thr Met Val Thr Val Ser Ser
 1          5          10

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<210> 445
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <223> BCMA-47 VH FR4 (aa)

<400> 445
 Trp Arg Gln Gly Thr Met Val Thr Val Ser Ser
 1 5 10

<210> 446
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-25 VL FR1 (aa)

<400> 446
 Asp Ile Gln Met Thr Gln Ser Pro Ala Phe Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Val Thr Cys
 20

<210> 447
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-28 VL FR1 (aa)

<400> 447
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Ser Val Thr Pro Gly

1 5 10 15
 Glu Pro Ala Ser Ile Ser Cys
 20

<210> 448
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-29 VL FR1 (aa)

<400> 448
 Gln Pro Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Ser Ile Thr Ile Ser Cys
 20

<210> 449
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-30 VL FR1 (aa)

<400> 449
 Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1 5 10 15
 Glu Arg Ala Thr Leu Ser Cys
 20

<210> 450
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>

<223> BCMA-31 VL FR1 (aa)

<400> 450

Asp	Val	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly
1				5				10					15		
Glu	Arg	Ala	Thr	Ile	Ser	Cys									
			20												

<210> 451

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-32 VL FR1 (aa)

<400> 451

Gln	Thr	Val	Val	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Gln
1				5				10					15		
Thr	Ala	Arg	Ile	Thr	Cys										
			20												

<210> 452

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-34 VL FR1 (aa)

<400> 452

Glu	Ile	Val	Met	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Leu	Ser	Pro	Gly
1				5				10					15		
Asp	Arg	Ala	Thr	Leu	Ser	Cys									
			20												

<210> 453

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

<220>
 <223> Synthetic

<220>
 <223> BCMA-35 VL FR1 (aa)

<400> 453
 Asn Phe Met Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln
 1 5 10 15
 Thr Ala Arg Ile Thr Cys
 20

<210> 454
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-36 VL FR1 (aa)

<400> 454
 Gln Ser Val Leu Thr Gln Glu Pro Ser Leu Thr Val Ser Pro Gly Glu
 1 5 10 15
 Thr Val Thr Leu Thr Cys
 20

<210> 455
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-37 VL FR1 (aa)

<400> 455
 Gln Leu Val Leu Thr Gln Glu Pro Ser Leu Thr Val Ser Pro Gly Gly

1 5 10 15
 Thr Val Thr Leu Thr Cys
 20

<210> 456
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-38 VL FR1 (aa)

<400> 456
 Gln Ala Val Leu Thr Gln Glu Pro Ser Leu Thr Val Ser Pro Gly Gly
 1 5 10 15
 Thr Val Thr Leu Thr Cys
 20

<210> 457
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-39 VL FR1 (aa)

<220>
 <221> VARIANT
 <222> 4
 <223> Xaa = any amino acid

<400> 457
 Asp Ile Gln Xaa Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys
 20

<210> 458
 <211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-41 VL FR1 (aa)

<400> 458

Gln	Pro	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Gly	Thr	Pro	Gly	Gln
1				5					10					15	
Arg	Val	Thr	Ile	Pro	Cys										
			20												

<210> 459

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-42 VL FR1 (aa)

<400> 459

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Leu	Val	Ser	Ala	Ser	Val	Gly
1				5					10					15	
Asp	Arg	Val	Thr	Ile	Thr	Cys									
			20												

<210> 460

<211> 732

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-55 scFv (nt)
(0/SSE)

<400> 460

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agctgtaccg gcaccagctc tgacgttggc tggatatcagc agcaccctgg caaggcccct 120
aagctgatga tctacgagga cagcaagagg cccagcggcg tgtccaatag attcagcggc 180
agcaagagcg gcaacaccgc cagcctgaca attagcggac tgcaggccga ggacgaggcc 240
gattactact gcagcagcaa caccgggtcc agcacactgg tttttggcgg aggcaccaag 300
ctgacagtgc tgggatctag aggtggcgga ggatctggcg gcggagggaag cggaggcggc 360
ggatctcttg aaatggctga agtgcagctg gtgcagtctg gcgccgagat gaagaaacct 420
ggcgccctctc tgaagctgag ctgcaaggcc agcggctaca ccttcacga ctactacgtg 480
tactggatgc ggaggcccc tggacaggga ctcgaatcta tgggctggat caaccccaat 540
agcggcggca ccaattacgc ccagaaattc cagggcagag tgaccatgac cagagacacc 600
agcatcagca ccgcctacat ggaactgagc cggctgagat ccgacgacac cgccatgtac 660
tactgcgcca gatctcagcg cgacggctac atggattatt ggggccaggg aaccctggtc 720
accgtgtcca gc                                     732

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<210> 461
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-44 VL FR1 (aa)

<400> 461
 Asp Val 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
 20

<210> 462
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-45 VL FR1 (aa)

<400> 462
 Ala Ile Arg Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys
 20

<210> 463
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-47 VL FR1 (aa)

<400> 463
 Gln Ala Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15
 Thr Ala Thr Ile Thr Cys
 20

<210> 464
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-48 VL FR1 (aa)

<400> 464
 Gln Pro Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15
 Thr Ala Thr Ile Thr Cys
 20

<210> 465
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-49 VL FR1 (aa)

354246_1.txt

<400> 465

Leu Pro Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15
 Thr Ala Arg Ile Thr Cys
 20

<210> 466

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-51 VL FR1 (aa)

<400> 466

Ala Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Ala Ile Thr Cys
 20

<210> 467

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-25 VL FR2 (aa)

<400> 467

Trp Tyr Gln Gln Lys Pro Gly Asn Ala Pro Arg Leu Leu Ile Tyr
 1 5 10 15

<210> 468

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-28 VL FR2 (aa)

<400> 468

Trp	Tyr	Leu	Gln	Lys	Pro	Gly	Gln	Ser	Pro	Gln	Leu	Leu	Ile	Tyr
1				5				10						15

<210> 469

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-29 VL FR2 (aa)

<400> 469

Trp	Tyr	Gln	Gln	His	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Met	Ile	Tyr
1				5				10						15

<210> 470

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-30 VL FR2 (aa)

<400> 470

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Lys	Leu	Leu	Ile	Tyr
1				5				10						15

<210> 471

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-31 VL FR2 (aa)

<400> 471

Trp	Tyr	Lys	Gln	Lys	Pro	Gly	Gln	Pro	Pro	Lys	Leu	Val	Ile	Ser
1				5				10						15

<210> 472

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-32 VL FR2 (aa)

<400> 472

Trp	Tyr	Arg	Gln	Arg	Pro	Gly	Gln	Ala	Pro	Glu	Val	Val	Ile	Tyr
1				5				10						15

<210> 473

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-36 VL FR2 (aa)

<400> 473

Trp	Phe	Gln	Lys	Lys	Pro	Gly	Gln	Ala	Pro	Thr	Thr	Leu	Ile	Tyr
1				5				10						15

<210> 474

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-37, -38 VL FR2 (aa)

<400> 474

Trp	Phe	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Thr	Leu	Ile	Tyr
1				5					10					15

<210> 475

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-39 VL FR2 (aa)

<400> 475

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile	Tyr
1				5					10					15

<210> 476

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-41 VL FR2 (aa)

<400> 476

Trp	Phe	Gln	Glu	Val	Pro	Gly	Thr	Ala	Pro	Lys	Leu	Leu	Ile	Tyr
1				5					10					15

<210> 477

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-42 VL FR2 (aa)

<400> 477

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Leu	Phe
1				5					10					15

<210> 478

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-55 scFv (aa)

<400> 478

Gln	Ser	Ala	Leu	Thr	Gln	Pro	Ala	Ser	Val	Ser	Ala	Ser	Pro	Gly	Gln
1				5					10					15	
Ser	Ile	Ala	Ile	Ser	Cys	Thr	Gly	Thr	Ser	Ser	Asp	Val	Gly	Trp	Tyr
			20					25					30		
Gln	Gln	His	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Met	Ile	Tyr	Glu	Asp	Ser
		35					40					45			
Lys	Arg	Pro	Ser	Gly	Val	Ser	Asn	Arg	Phe	Ser	Gly	Ser	Lys	Ser	Gly
	50					55					60				
Asn	Thr	Ala	Ser	Leu	Thr	Ile	Ser	Gly	Leu	Gln	Ala	Glu	Asp	Glu	Ala
65					70					75					80
Asp	Tyr	Tyr	Cys	Ser	Ser	Asn	Thr	Arg	Ser	Ser	Thr	Leu	Val	Phe	Gly
				85					90					95	
Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu	Gly	Ser	Arg	Gly	Gly	Gly	Gly	Ser
			100					105					110		
Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Leu	Glu	Met	Ala	Glu	Val
		115					120					125			
Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Met	Lys	Lys	Pro	Gly	Ala	Ser	Leu
		130				135					140				
Lys	Leu	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Ile	Asp	Tyr	Tyr	Val
145					150					155					160
Tyr	Trp	Met	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Ser	Met	Gly	Trp
				165					170					175	
Ile	Asn	Pro	Asn	Ser	Gly	Gly	Thr	Asn	Tyr	Ala	Gln	Lys	Phe	Gln	Gly
			180					185					190		
Arg	Val	Thr	Met	Thr	Arg	Asp	Thr	Ser	Ile	Ser	Thr	Ala	Tyr	Met	Glu
		195					200					205			

354246_1.txt

Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Met Tyr Tyr Cys Ala Arg
 210 215 220
 Ser Gln Arg Asp Gly Tyr Met Asp Tyr Trp Gly Gln Gly Thr Leu Val
 225 230 235 240
 Thr Val Ser Ser

<210> 479
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-45 VL FR2 (aa)

<400> 479
 Trp Tyr Lys Gln Lys Pro Gly Gly Val Pro Gln Leu Leu Ile His
 1 5 10 15

<210> 480
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-47, -48 VL FR2 (aa)

<400> 480
 Trp Tyr Gln Arg Lys Pro Gly Gln Gly Pro Val Val Val Ile Gln
 1 5 10 15

<210> 481
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>

<223> BCMA-49 VL FR2 (aa)

<400> 481

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

<210> 482

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-51 VL FR2 (aa)

<400> 482

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile	Phe
1				5					10				15	

<210> 483

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-24 VL FR3 (aa)

<400> 483

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

<210> 484

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-25 VL FR3 (aa)

<400> 484

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

<210> 485

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-28 VL FR3 (aa)

<400> 485

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

<210> 486

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-29 VL FR3 (aa)

<400> 486

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

<210> 487
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-30 VL FR3 (aa)

<400> 487
 Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15
 Leu Thr Ile Ser Arg Leu Glu His Glu Asp Phe Ala Val Tyr Tyr Arg
 20 25 30

<210> 488
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-32 VL FR3 (aa)

<400> 488
 Gly Val Pro Asp Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr
 1 5 10 15
 Leu Thr Val Arg Gly Val Glu Ala Gly Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 489
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-34 VL FR3 (aa)

<400> 489

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Gly	Ile	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr
1				5				10						15	
Leu	Thr	Ile	Ser	Ser	Leu	Glu	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys
			20					25					30		

<210> 490

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-36 VL FR3 (aa)

<400> 490

Trp	Thr	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Leu	Leu	Gly	Gly	Lys	Ala	Ala
1				5				10						15	
Leu	Thr	Leu	Ser	Gly	Ala	Gln	Pro	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys
			20					25					30		

<210> 491

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-37 VL FR3 (aa)

<400> 491

Trp	Thr	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Leu	Leu	Gly	Gly	Lys	Ala	Ala
1				5				10						15	
Leu	Thr	Leu	Ser	Gly	Ala	Gln	Pro	Glu	Asp	Glu	Ala	Glu	Tyr	Tyr	Cys
			20					25					30		

<210> 492

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-38 VL FR3 (aa)

<400> 492

Trp	Thr	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Leu	Leu	Gly	Gly	Lys	Ala	Ala
1				5				10					15		
Leu	Thr	Leu	Ser	Gly	Ala	Gln	Pro	Glu	Asp	Glu	Ala	Asp	Tyr	Phe	Cys
			20					25					30		

<210> 493

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-39 VL FR3 (aa)

<400> 493

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

<210> 494

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-41 VL FR3 (aa)

<400> 494

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

<210> 495
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-42 VL FR3 (aa)

<400> 495
 Gly Val Pro Ser Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Tyr Thr
 1 5 10 15
 Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys
 20 25 30

<210> 496
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-52 CDR-H1 (aa)

<400> 496
 Gly Tyr Ser Phe Thr Ser Tyr Trp
 1 5

<210> 497
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-45 VL FR3 (aa)

<400> 497
 Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr
 1 5 10 15

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Leu Thr Ile Ser Gly Val Gln Ser Glu Asp Ser Ala Thr Tyr His Cys
 20 25 30

<210> 498
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-47 VL FR3 (aa)

<400> 498
 Gly Ile Pro Glu Arg Phe Ser Gly Ser Lys Ser Gly Asp Thr Ala Ser
 1 5 10 15
 Leu Thr Ile Ser Gly Val Glu Ala Gly Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 499
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-48 VL FR3 (aa)

<400> 499
 Gly Ile Pro Glu Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr
 1 5 10 15
 Leu Thr Ile Ser Arg Val Glu Ala Gly Asp Glu Gly Asp Tyr Tyr Cys
 20 25 30

<210> 500
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>

<223> BCMA-49 VL FR3 (aa)

<400> 500

Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser	Asn	Ser	Gly	Asn	Thr	Ala	Thr
1				5				10					15		
Leu	Thr	Ile	Ser	Arg	Val	Glu	Ala	Gly	Asp	Glu	Ala	Ala	Tyr	Tyr	Cys
			20					25					30		

<210> 501

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-51 VL FR3 (aa)

<400> 501

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

<210> 502

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-25 VL FR4 (aa)

<400> 502

Phe	Gly	Pro	Gly	Thr	Arg	Leu	Asp	Ile	Lys
1				5				10	

<210> 503

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-29 VL FR4 (aa)

<220>

<221> VARIANT

<222> 3

<223> Xaa = any amino acid

<400> 503

Phe	Gly	Xaa	Gly	Thr	Lys	Leu	Thr	Val	Leu
1				5					10

<210> 504

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-31, -34 VL FR4 (aa)

<400> 504

Phe	Gly	Gln	Gly	Thr	Lys	Leu	Asp	Ile	Lys
1				5					10

<210> 505

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-35 VL FR4 (aa)

<400> 505

Phe	Gly	Thr	Gly	Thr	Lys	Leu	Asp	Ile	Lys
1				5					10

<210> 506
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-42 VL FR4 (aa)

<400> 506
 Phe Gly Gly Gly Thr Lys Val Asp Ile Lys
 1 5 10

<210> 507
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-52 CDR-H2 (aa)

<400> 507
 Ile Tyr Pro Gly Asp Ser Asp Thr
 1 5

<210> 508
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-24, -28, -51 VL FR4 (aa)

<400> 508
 Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 1 5 10

<210> 509
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-30 CDR-H1 (aa) AbM numbering

<400> 509
Gly Phe Thr Phe Gly Asp Tyr Ala Met His
1 5 10

<210> 510
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-28 CDR-H2 (aa) AbM numbering

<220>
<221> VARIANT
<222> 10
<223> Xaa = any amino acid

<400> 510
Gly Ile Ser Trp Asn Ser Gly Ser Ile Xaa
1 5 10

<210> 511
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-33 CDR-H2 (aa) AbM numbering

<400> 511

Tyr Ile Ser Gly Ser Gly Ser Thr Ile Tyr
1 5 10

<210> 512

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-41 CDR-H2 AbM numbering

<400> 512

Tyr Ile Ser Ser Ser Gly Asn Thr Ile Tyr
1 5 10

<210> 513

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-52 CDR-H3 (aa)

<400> 513

Ala Arg Tyr Ser Gly Ser Phe Asp Asn
1 5

<210> 514

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-28 CDR-H2 (aa) Chothia numbering

<400> 514

Ser Trp Asn Ser Gly

1 5

<210> 515

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-33 CDR-H2 (aa) Chothia numbering

<400> 515

Ser Gly Ser Gly Ser Thr

1 5

<210> 516

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-41 CDR-H2 Chothia numbering

<400> 516

Ser Ser Ser Gly Asn Thr

1 5

<210> 517

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-52 CDR-L1 (aa)

<400> 517

Ser Ser Asn Ile Gly Ser His Ser
 1 5

<210> 518

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-24 VH chain (aa)

<400> 518

Glu Val Gln Leu Val Gln 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Gly 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 Asn Ser 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 Asp Leu Gly Pro Pro Tyr Gly Asp Asp Ala Phe Asp Ile Trp
 100 105 110
 Gly Gln Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 519

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-25, -31, -44, -51 VH chain (aa)

<400> 519

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```

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1           5           10           15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
          20           25           30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35           40           45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
          50           55           60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
65           70           75           80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
          85           90           95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
          100          105          110
Leu Val Thr Val Ser Ser
          115

```

<210> 520

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-27 VH chain (aa)

<400> 520

```

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1           5           10           15
Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Asp 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 Gly 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 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 Gly Gly Leu Gly Ile Thr Pro Tyr Tyr Phe Asp Tyr Trp Gly
          100          105          110
Gln Gly Thr Leu Val Thr Val Ser Ser
          115          120

```

<210> 521
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-28 VH chain (aa)

<220>
 <221> VARIANT
 <222> 59
 <223> Xaa = any amino acid

<400> 521
 Gln Val Gln Leu Val Gln 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 Asp 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 Gly Ile Ser Trp Asn Ser Gly Ser Ile Xaa 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 Val Tyr Tyr Cys
 85 90 95
 Ala Arg Asp Leu Gly Pro Pro Tyr Gly Asp Asp Ala Phe Asp Ile Gly
 100 105 110
 Gly Gln Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 522
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-29, -39 VH chain (aa)

<400> 522
 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg

354246_1.txt

```

1           5           10           15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp 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 Gly 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 Asn Ser 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 Asp Leu Gly Pro Pro Tyr Gly Asp Asp Ala Phe Asp Ile Trp
100          105          110
Gly Gln Gly Thr Met Val Thr Val Ser Ser
115          120

```

<210> 523

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-30 VH chain (aa)

<400> 523

```

Gln Val Gln Leu Val Gln 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 Gly 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 Gly 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 Asn Ser 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 Asp Leu Asp Pro Asp Asp Ala Phe Asp Ile Trp Gly Gln Gly
100          105          110
Thr Met Val Thr Val Ser Ser
115

```

<210> 524

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

<220>
 <223> Synthetic

<220>
 <223> BCMA-32, -49 VH chain (aa)

<400> 524
 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95
 Ala Lys Val Asp Gly Pro Pro Ser Phe Asp Ile Trp Gly Gln Gly Thr
 100 105 110
 Met Val Thr Val Ser Ser
 115

<210> 525
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-33 VH chain (aa)

<400> 525
 Gln Val Gln Leu Val Gln 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Gly Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val

354246_1.txt

```

      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 Val Tyr Tyr Cys
      85              90              95
Ala Arg Glu Ala Asp Ser Ser Ala Asp Tyr Trp Gly Gln Gly Thr Leu
      100              105              110
Val Asn Val Ser Ser
      115

```

<210> 526
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-34 VH chain (aa)

```

<400> 526
Thr Gly Gln Leu Val Gln 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 Asp 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 Gly 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 Asn Ser 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 Asp Leu Gly Pro Asp Tyr Asp Pro Asp Ala Phe Asp Ile Trp
      100              105              110
Gly Gln Gly Thr Met Val Thr Val Ser Ser
      115              120

```

<210> 527
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

354246_1.txt

<220>

<223> BCMA-35 VH chain (aa)

<400> 527

Glu	Val	Gln	Leu	Val	Gln	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	Asp	Tyr
		20						25					30		
Tyr	Met	Ser	Trp	Ile	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			
Ser	Tyr	Ile	Ser	Ser	Ser	Gly	Ser	Thr	Ile	Tyr	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	Val	Tyr	Tyr	Cys
			85					90					95		
Ala	Arg	Val	Asp	Gly	Asp	Tyr	Asp	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu
			100					105					110		
Val	Thr	Val	Ser	Ser											
			115												

<210> 528

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-36, 38 VH chain (aa)

<400> 528

Gln	Val	Gln	Leu	Val	Gln	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	Asp	Tyr
		20						25					30		
Tyr	Met	Ser	Trp	Ile	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			
Ser	Tyr	Ile	Ser	Ser	Ser	Gly	Ser	Thr	Ile	Tyr	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	Val	Tyr	Tyr	Cys
			85					90					95		
Ala	Arg	Val	Asp	Gly	Asp	Tyr	Val	Asp	Asp	Tyr	Trp	Gly	Gln	Gly	Thr

100 105 110
 Leu Val Thr Val Ser Ser
 115

<210> 529
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-37 VH chain (aa)

<400> 529
 Glu Val Gln Leu Val Gln 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser 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 Val Asp Gly Asp Tyr Val Asp Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Leu Val Thr Val Ser Ser
 115

<210> 530
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-41 VH chain (aa)

<400> 530
 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Lys Pro Gly Gly

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```

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 Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35           40           45
Ser Tyr Ile Ser Ser Ser Gly Asn Thr Ile Tyr 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 Val Tyr Tyr Cys
85           90           95
Ala Lys Val Asp Gly Asp Tyr Val Asp Asp Tyr Trp Gly Gln Gly Thr
100          105          110
Leu Val Thr Val Ser Ser
115

```

<210> 531

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-42 VH chain (aa)

<400> 531

```

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1           5           10           15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
20           25           30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35           40           45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
50           55           60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
65           70           75           80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
85           90           95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
100          105          110
Leu Val Thr Val Ser Ser
115

```

<210> 532

<211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-52 CDR-L2 (aa)

<400> 532
 Thr Asn Asn
 1

<210> 533
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-47 VH chain (aa)

<400> 533
 Gln Val Gln Leu Leu 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Asp Ser Pro Ser Pro Gly Thr Thr Pro Lys Asn Ser 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 Lys Val Asp Gly Pro Pro Ser Phe Asp Ile Trp Arg Gln Gly Thr
 100 105 110
 Met Val Thr Val Ser Ser
 115

<210> 534
 <211> 113
 <212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-24 VL chain (aa)

<400> 534

```

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

```

<210> 535

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-25 VL chain (aa)

<400> 535

```

Asp Ile Gln Met Thr Gln Ser Pro Ala Phe Leu Ser Ala Ser Val Gly
 1           5           10           15
Asp Arg Val Thr Val Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
      20           25           30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Asn Ala Pro Arg Leu Leu Ile
      35           40           45
Tyr Ser Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Arg Gly
      50           55           60
Thr Gly Tyr Gly Thr Glu Phe Ser Leu Thr Ile Asp Ser Leu Gln Pro

```

354246_1.txt

65 70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Thr Ser Arg Gln
85 90 95
Thr Phe Gly Pro Gly Thr Arg Leu Asp Ile Lys
100 105

```
<210> 536
<211> 108
<212> PRT
<213> Artificial Sequence
```

<220>
<223> Synthetic

<220>
<223> BCMA-26 VL chain (aa)

<400> 536															
Ser	Tyr	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Gln
1				5					10					15	
Thr	Ala	Arg	Ile	Thr	Cys	Gly	Ala	Asn	Asn	Ile	Gly	Ser	Lys	Ser	Val
			20					25					30		
His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Met	Leu	Val	Val	Tyr
		35					40					45			
Asp	Asp	Asp	Asp	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser
	50					55					60				
Asn	Ser	Gly	Asn	Thr	Ala	Thr	Leu	Thr	Ile	Ser	Gly	Val	Glu	Ala	Gly
65					70					75					80
Asp	Glu	Ala	Asp	Tyr	Phe	Cys	His	Leu	Trp	Asp	Arg	Ser	Arg	Asp	His
				85					90					95	
Tyr	Val	Phe	Gly	Thr	Gly	Thr	Lys	Leu	Thr	Val	Leu				
			100					105							

```
<210> 537
<211> 113
<212> PRT
<213> Artificial Sequence
```

<220>
<223> Synthetic

<220>
<223> BCMA-28 VL chain (aa)

<400> 537
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Ser Val Thr Pro Gly

354246_1.txt

1				5					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	Ser	Asn	Arg	Ala	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	Met	Gln	Ala	
			85					90					95			
Leu	Gln	Thr	Pro	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	
			100					105					110			

Lys

<210> 538
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-29 VL chain (aa)

<220>
 <221> VARIANT
 <222> 105
 <223> Xaa = any amino acid

<400> 538																
Gln	Pro	Val	Leu	Thr	Gln	Pro	Ala	Ser	Val	Ser	Gly	Ser	Pro	Gly	Gln	
1				5				10					15			
Ser	Ile	Thr	Ile	Ser	Cys	Thr	Gly	Thr	Ser	Ser	Asp	Val	Gly	Ser	Tyr	
		20					25					30				
Asn	Leu	Val	Ser	Trp	Tyr	Gln	Gln	His	Pro	Gly	Lys	Ala	Pro	Lys	Leu	
		35				40					45					
Met	Ile	Tyr	Glu	Val	Ser	Lys	Arg	Pro	Ser	Gly	Val	Ser	Asn	Arg	Phe	
	50					55			60							
Ser	Gly	Ser	Lys	Ser	Gly	Asn	Thr	Ala	Ser	Pro	Thr	Ile	Ser	Gly	Leu	
65				70					75				80			
Gln	Ala	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Cys	Ser	Tyr	Ala	Gly	Ser	
			85				90					95				
Ser	Thr	Ser	Arg	Asp	Val	Phe	Gly	Xaa	Gly	Thr	Lys	Leu	Thr	Val	Leu	
			100				105					110				

354246_1.txt

<210> 539
 <211> 105
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-30 VL chain (aa)

<400> 539
 Glu Ile Val Leu 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 Pro Ile Arg Ser Asn
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ser Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu His
 65 70 75 80
 Glu Asp Phe Ala Val Tyr Tyr Arg Arg His Tyr Ala Pro Leu Thr Phe
 85 90 95
 Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 540
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-31 VL chain (aa)

<400> 540
 Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Glu Arg Ala Thr Ile Ser Cys Lys Ser Ser Gln Ser Val Leu Asn Ser
 20 25 30
 Ser Asn Asn Lys Asn Tyr Val Ala Trp Tyr Lys Gln Lys Pro Gly Gln
 35 40 45

354246_1.txt

Pro Pro Lys Leu Val Ile Ser Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Tyr Ser Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Asp Ile
 100 105 110
 Lys

<210> 541
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-32 VL chain (aa)

<400> 541
 Gln Thr Val Val Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln
 1 5 10 15
 Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile Gly Ser Lys Gly Val
 20 25 30
 His Trp Tyr Arg Gln Arg Pro Gly Gln Ala Pro Glu Val Val Ile Tyr
 35 40 45
 Asp Asp Ser Asp Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser
 50 55 60
 Asn Ser Gly Asn Thr Ala Thr Leu Thr Val Arg Gly Val Glu Ala Gly
 65 70 75 80
 Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ser Ser Asp His
 85 90 95
 Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 542
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

354246_1.txt

<220>

<223> BCMA-34 VL chain (aa)

<400> 542

Glu	Ile	Val	Met	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Leu	Ser	Pro	Gly
1				5					10					15	
Asp	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Ile	Ser	Asn	Tyr
		20						25					30		
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile
		35					40					45			
Tyr	Asp	Ala	Ser	Asn	Arg	Ala	Thr	Gly	Ile	Pro	Ala	Arg	Phe	Ser	Gly
	50					55					60				
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Glu	Pro
65					70					75				80	
Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Arg	Ser	Asn	Trp	Pro	Pro
				85					90					95	
Tyr	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Asp	Ile	Lys				
			100					105							

<210> 543

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-35 VL chain (aa)

<400> 543

Asn	Phe	Met	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Gln
1				5					10					15	
Thr	Ala	Arg	Ile	Thr	Cys	Gly	Ala	Asn	Ile	Gly	Ser	Lys	Ser	Val	
		20						25				30			
His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Met	Leu	Val	Val	Tyr
		35					40					45			
Asp	Asp	Asp	Asp	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser
	50					55					60				
Asn	Ser	Gly	Asn	Thr	Ala	Thr	Leu	Thr	Ile	Ser	Gly	Val	Glu	Ala	Gly
65					70					75				80	
Asp	Glu	Ala	Asp	Tyr	Phe	Cys	His	Leu	Trp	Asp	Arg	Ser	Arg	Asp	His
				85					90					95	
Tyr	Val	Phe	Gly	Thr	Gly	Thr	Lys	Leu	Asp	Ile	Lys				
			100					105							

354246_1.txt

<210> 544
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-36 VL chain (aa)

<400> 544
 Gln Ser Val Leu Thr Gln Glu Pro Ser Leu Thr Val Ser Pro Gly Glu
 1 5 10 15
 Thr Val Thr Leu Thr Cys Gly Ser Ser Thr Gly Pro Val Thr Ser Ala
 20 25 30
 His Ser Pro Ser Trp Phe Gln Lys Lys Pro Gly Gln Ala Pro Thr Thr
 35 40 45
 Leu Ile Tyr Glu Thr Thr Asn Arg His Ser Trp Thr Pro Ala Arg Phe
 50 55 60
 Ser Gly Ser Leu Leu Gly Gly Lys Ala Ala Leu Thr Leu Ser Gly Ala
 65 70 75 80
 Gln Pro Glu Asp Glu Ala Asp Tyr Tyr Cys Leu Leu Ser Ser Gly Asp
 85 90 95
 Ala Arg Met Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 545
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-37 VL chain (aa)

<400> 545
 Gln Leu Val Leu Thr Gln Glu Pro Ser Leu Thr Val Ser Pro Gly Gly
 1 5 10 15
 Thr Val Thr Leu Thr Cys Gly Ser Ser Thr Gly Ala Val Thr Asn Gly
 20 25 30
 His Ser Pro Tyr Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro Arg Thr
 35 40 45
 Leu Ile Tyr Asp Thr Thr Asn Arg His Ser Trp Thr Pro Ala Arg Phe
 50 55 60

354246_1.txt

```
Ser Gly Ser Leu Leu Gly Gly Lys Ala Ala Leu Thr Leu Ser Gly Ala
65          70          75          80
Gln Pro Glu Asp Glu Ala Glu Tyr Tyr Cys Ser Leu Ser His Ala Gly
          85          90          95
Asp Arg Val Phe Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
          100          105          110
```

<210> 546
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-38 VL chain (aa)

```
<400> 546
Gln Ala Val Leu Thr Gln Glu Pro Ser Leu Thr Val Ser Pro Gly Gly
1          5          10          15
Thr Val Thr Leu Thr Cys Gly Ser Ser Thr Gly Ala Val Thr Asn Gly
          20          25          30
His Ser Pro Tyr Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro Arg Thr
          35          40          45
Leu Ile Tyr Asp Thr Asn Asn Arg His Ser Trp Thr Pro Ala Arg Phe
          50          55          60
Ser Gly Ser Leu Leu Gly Gly Lys Ala Ala Leu Thr Leu Ser Gly Ala
65          70          75          80
Gln Pro Glu Asp Glu Ala Asp Tyr Phe Cys Leu Leu Ser Tyr Ser Asp
          85          90          95
Ala Arg Leu Ala Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
          100          105          110
```

<210> 547
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-39 VL chain (aa)

<220>

<221> VARIANT

<222> 4

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 34

<223> Xaa = any amino acid

<400> 547

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

<210> 548

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-40 VL chain (aa)

<400> 548

Gln	Ser	Ala	Leu	Thr	Gln	Pro	Ala	Ser	Val	Ser	Gly	Ser	Pro	Gly	Gln
1				5				10						15	
Ser	Ile	Thr	Ile	Ser	Cys	Thr	Gly	Ser	Ser	Ser	Asp	Val	Ser	Lys	Tyr
			20					25					30		
Asn	Leu	Val	Ser	Trp	Tyr	Gln	Gln	Pro	Pro	Gly	Lys	Ala	Pro	Lys	Leu
		35					40					45			
Ile	Ile	Tyr	Asp	Val	Asn	Lys	Arg	Pro	Ser	Gly	Val	Ser	Asn	Arg	Phe
	50					55					60				
Ser	Gly	Ser	Lys	Ser	Gly	Asn	Thr	Ala	Thr	Leu	Thr	Ile	Ser	Gly	Leu
65					70					75					80

354246_1.txt

Gln Gly Asp Asp Glu Ala Asp Tyr Tyr Cys Cys Ser Tyr Gly Gly Ser
 85 90 95
 Arg Ser Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 549
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-41 VL chain (aa)

<400> 549
 Gln Pro Val Leu Thr Gln Pro Pro Ser Val Ser Gly Thr Pro Gly Gln
 1 5 10 15
 Arg Val Thr Ile Pro Cys Ser Gly Ser Ser Ser Asn Ile Gly Gly Asn
 20 25 30
 Ser Val Asp Trp Phe Gln Glu Val Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45
 Ile Tyr Ala Asn Asp Arg Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
 50 55 60
 Gly Thr Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Arg Gly Leu Gln
 65 70 75 80
 Ser Asp Asp Asp Ala His Tyr Tyr Cys Glu Ser Trp Asp Asp Ala Leu
 85 90 95
 Asn Gly His Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 550
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-42 VL chain (aa)

<400> 550
 Asp Ile Gln Met Thr Gln Ser Pro Ser Leu Val Ser Ala Ser Val Gly
 1 5 10 15

354246_1.txt

```

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

```

<210> 551

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-52 CDR-L3 (aa)

<400> 551

```

Ala Ala Trp Asp Gly Ser Leu Asn Gly Leu Val
  1          5          10

```

<210> 552

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-44 VL chain (aa)

<400> 552

```

Asp Val 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 Lys Ser Ser Gln Asn Leu Leu Tyr Ser
    20          25          30
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
    35          40          45

```

354246_1.txt

```

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
  50          55          60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65          70          75          80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
      85          90          95
Tyr Tyr Ser Ser Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
      100          105          110
Lys

```

<210> 553
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-45 VL chain (aa)

```

<400> 553
Ala Ile Arg 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 Gly Arg Ser
      20          25          30
Leu Ala Trp Tyr Lys Gln Lys Pro Gly Gly Val Pro Gln Leu Leu Ile
      35          40          45
His Asp Ala Ser Ser Leu Arg Ser Gly Val Pro Ser Arg Phe Ser Gly
      50          55          60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Gly Val Gln Ser
65          70          75          80
Glu Asp Ser Ala Thr Tyr His Cys Gln Gln Leu Asn Gly Tyr Pro Trp
      85          90          95
Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
      100          105

```

<210> 554
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

354246_1.txt

<220>

<223> BCMA-47 VL chain (aa)

<400> 554

Gln	Ala	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Lys
1				5					10					15	
Thr	Ala	Thr	Ile	Thr	Cys	Gly	Gly	Asn	Asn	Ile	Gly	Ser	Lys	Ser	Val
			20					25					30		
His	Trp	Tyr	Gln	Arg	Lys	Pro	Gly	Gln	Gly	Pro	Val	Val	Val	Ile	Gln
		35					40					45			
Tyr	Asp	Thr	Asp	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser
	50					55					60				
Lys	Ser	Gly	Asp	Thr	Ala	Ser	Leu	Thr	Ile	Ser	Gly	Val	Glu	Ala	Gly
65					70					75					80
Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Leu	Trp	Asp	Ser	Asp	Ser	Asp	Asp
			85						90					95	
Phe	Ala	Phe	Gly	Thr	Gly	Thr	Lys	Leu	Thr	Val	Leu				
			100					105							

<210> 555

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-48 VL chain (aa)

<400> 555

Gln	Pro	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Lys
1				5					10					15	
Thr	Ala	Thr	Ile	Thr	Cys	Gly	Gly	Asn	Asn	Ile	Gly	Ser	Lys	Ser	Val
			20					25					30		
His	Trp	Tyr	Gln	Arg	Lys	Pro	Gly	Gln	Gly	Pro	Val	Val	Val	Ile	Gln
		35					40					45			
Tyr	Asp	Thr	Asp	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser
	50					55					60				
Asn	Ser	Gly	Asn	Thr	Ala	Thr	Leu	Thr	Ile	Ser	Arg	Val	Glu	Ala	Gly
65					70					75					80
Asp	Glu	Gly	Asp	Tyr	Tyr	Cys	Gln	Val	Trp	Asp	Ser	Ser	Ser	Asp	His
			85						90					95	
Trp	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu				
			100					105							

354246_1.txt

<210> 556
 <211> 109
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-49 VL chain (aa)

<400> 556
 Leu Pro Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15
 Thr Ala Arg Ile Thr Cys Gly Gly Asp Gln Ile Gly Arg Lys Ser Val
 20 25 30
 His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Met Ser
 35 40 45
 Tyr Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
 50 55 60
 Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80
 Asp Glu Ala Ala Tyr Tyr Cys Gln Val Trp Asp Ser Ser Thr Gly Gln
 85 90 95
 Tyr Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 557
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-51 VL chain (aa)

<400> 557
 Ala Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Ala Ile Thr Cys Arg Ala Ser Gln Asn Ile Gly Asp Trp
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Phe Gly Ala Ser Ile Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

354246_1.txt

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Val Ala Val Tyr Tyr Cys Gln Lys Tyr Asp Gly Ala Pro Pro
85 90 95
Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 558
<211> 250
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-24 scFv sequence (aa)

<220>
<221> VARIANT
<222> 204
<223> Xaa = any amino acid

<400> 558
Glu Val Gln Leu Val Gln 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 Asp Tyr
20 25 30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Gly 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 Asn Ser 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 Asp Leu Gly Pro Pro Tyr Gly Asp Asp Ala Phe Asp Ile Trp
100 105 110
Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Ser
130 135 140
Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys
145 150 155 160
Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn Asn Lys Asn Tyr Leu
165 170 175
Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr

354246_1.txt

```

      180      185      190
Trp Gly Ser Thr Arg Glu Ser Gly Val Pro Asp Xaa Phe Ser Gly Ser
      195      200      205
Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu
      210      215      220
Asp Val Ala Ile Tyr His Cys Gln Gln Tyr Ile Ser Leu Pro Trp Thr
225      230      235      240
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
      245      250

```

<210> 559

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-25 scFv sequence (aa)

<400> 559

```

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1      5      10      15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
      20      25      30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35      40      45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
      50      55      60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
65      70      75      80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
      85      90      95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
      100      105      110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
      115      120      125
Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ala Phe Leu
      130      135      140
Ser Ala Ser Val Gly Asp Arg Val Thr Val Thr Cys Arg Ala Ser Gln
145      150      155      160
Gly Ile Ser Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Asn Ala
      165      170      175
Pro Arg Leu Leu Ile Tyr Ser Ala Ser Thr Leu Gln Ser Gly Val Pro
      180      185      190
Ser Arg Phe Arg Gly Thr Gly Tyr Gly Thr Glu Phe Ser Leu Thr Ile

```

354246_1.txt

```

      195              200              205
Asp Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser
      210              215              220
Tyr Thr Ser Arg Gln Thr Phe Gly Pro Gly Thr Arg Leu Asp Ile Lys
225              230              235              240

```

<210> 560
 <211> 241
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-26 scFv sequence (aa)

```

<400> 560
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 Asp Tyr
      20              25              30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35              40              45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
      85              90              95
Ala Lys Val Asp Gly Pro Pro Ser Phe Asp Ile Trp Gly Gln Gly Thr
      100              105              110
Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
      115              120              125
Gly Gly Gly Gly Ser Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser
      130              135              140
Val Ala Pro Gly Gln Thr Ala Arg Ile Thr Cys Gly Ala Asn Asn Ile
145              150              155              160
Gly Ser Lys Ser Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
      165              170              175
Met Leu Val Val Tyr Asp Asp Asp Asp Arg Pro Ser Gly Ile Pro Glu
      180              185              190
Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser
      195              200              205
Gly Val Glu Ala Gly Asp Glu Ala Asp Tyr Phe Cys His Leu Trp Asp
      210              215              220
Arg Ser Arg Asp His Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val

```

225 230 235 240
 Leu

<210> 561
 <211> 240
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-27 scFv sequence (aa)

<400> 561
 Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Asp 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 Gly 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 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 Gly Gly Leu Gly Ile Thr Pro Tyr Tyr Phe Asp Tyr Trp Gly
 100 105 110
 Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
 115 120 125
 Gly Gly Ser Gly Gly Gly Gly Ser Gln Pro Val Leu Thr Gln Pro Pro
 130 135 140
 Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly
 145 150 155 160
 Gly Lys Thr Val Asn Trp Phe Arg Gln Val Pro Gly Thr Ala Pro Gln
 165 170 175
 Leu Leu Ile Tyr Ser Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg
 180 185 190
 Phe Ser Gly Ser Lys Ser Gly Ser Ser Ala Ser Leu Asp Ile Ser Gly
 195 200 205
 Leu Gln Ser Glu Asp Glu Ala Tyr Tyr Tyr Cys Gly Ser Trp Asp Asp
 210 215 220
 Ser Leu Asn Ala Trp Val Phe Gly Gly Glu Thr Lys Leu Thr Val Leu
 225 230 235 240

<210> 562
 <211> 250
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-28 scFv sequence (aa)

<220>
 <221> VARIANT
 <222> 59
 <223> Xaa = any amino acid

<400> 562
 Gln Val Gln Leu Val Gln 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 Asp 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 Gly Ile Ser Trp Asn Ser Gly Ser Ile Xaa 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 Val Tyr Tyr Cys
 85 90 95
 Ala Arg Asp Leu Gly Pro Pro Tyr Gly Asp Asp Ala Phe Asp Ile Gly
 100 105 110
 Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser Gly
 115 120 125
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Ser
 130 135 140
 Pro Leu Ser Leu Ser Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys
 145 150 155 160
 Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp
 165 170 175
 Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu
 180 185 190
 Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
 195 200 205
 Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp
 210 215 220
 Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Thr Pro Pro Trp Thr

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225 230 235 240
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 245 250

```
<210> 563
<211> 249
<212> PRT
<213> Artificial Sequence
```

<220>
<223> Synthetic

<220>
<223> BCMA-29 scFv sequence (aa)

```
<220>  
<221> VARIANT  
<222> 242  
<223> Xaa = any amino acid
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<400> 563															
Gln 1	Val	Gln	Leu	Val 5	Gln	Ser	Gly	Gly 10	Gly	Leu	Val	Gln	Pro	Gly 15	Arg
Ser	Leu	Arg	Leu 20	Ser	Cys	Ala	Ala	Ser 25	Gly	Phe	Thr	Phe	Asp 30	Asp	Tyr
Ala	Met	His 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Lys	Gly	Leu 45	Glu	Trp	Val
Ser	Gly 50	Ile	Ser	Trp	Asn 55	Ser	Gly	Ser	Ile	Gly	Tyr 60	Ala	Asp	Ser	Val
Lys 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Arg	Asp	Asn	Ala 75	Lys	Asn	Ser	Leu	Tyr 80
Leu	Gln	Met	Asn 85	Ser	Leu	Arg	Ala	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Asp	Leu 100	Gly	Pro	Pro	Tyr	Gly 105	Asp	Asp	Ala	Phe	Asp	Ile	Trp
Gly	Gln	Gly 115	Thr	Met	Val	Thr	Val	Ser 120	Ser	Gly	Gly	Gly 125	Gly	Ser	Gly
Gly	Gly 130	Gly	Ser	Gly	Gly 135	Gly	Gly	Ser	Gln	Pro	Val	Leu	Thr	Gln	Pro
Ala 145	Ser	Val	Ser	Gly	Ser 150	Pro	Gly	Gln	Ser	Ile	Thr	Ile	Ser	Cys	Thr 160
Gly	Thr	Ser	Ser	Asp 165	Val	Gly	Ser	Tyr	Asn 170	Leu	Val	Ser	Trp	Tyr	Gln
Gln	His	Pro	Gly 180	Lys	Ala	Pro	Lys	Leu 185	Met	Ile	Tyr	Glu	Val	Ser	Lys
Arg	Pro	Ser	Gly 195	Val	Ser	Asn	Arg 200	Phe	Ser	Gly	Ser	Lys	Ser	Gly	Asn
205															

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Thr	Ala	Ser	Pro	Thr	Ile	Ser	Gly	Leu	Gln	Ala	Glu	Asp	Glu	Ala	Asp
210						215					220				
Tyr	Tyr	Cys	Cys	Ser	Tyr	Ala	Gly	Ser	Ser	Thr	Ser	Arg	Asp	Val	Phe
225					230					235					240
Gly	Xaa	Gly	Thr	Lys	Leu	Thr	Val	Leu							
				245											

<210> 564
 <211> 239
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-30 scFv sequence (aa)

<400> 564

Gln	Val	Gln	Leu	Val	Gln	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	Gly	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	Gly	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	Asn	Ser	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	Asp	Leu	Asp	Pro	Asp	Asp	Ala	Phe	Asp	Ile	Trp	Gly	Gln	Gly
			100					105					110		
Thr	Met	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly
	115						120					125			
Ser	Gly	Gly	Gly	Gly	Ser	Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Ala	Thr
	130					135					140				
Leu	Ser	Val	Ser	Pro	Gly	Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser
145					150					155					160
Gln	Pro	Ile	Arg	Ser	Asn	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln
				165					170					175	
Ala	Pro	Lys	Leu	Leu	Ile	Tyr	Ser	Ala	Ser	Thr	Arg	Ala	Thr	Gly	Ile
			180					185					190		
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr
	195					200						205			
Ile	Ser	Arg	Leu	Glu	His	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Arg	Arg	His
	210					215						220			

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Tyr Ala Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
225 230 235

<210> 565
<211> 246
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-31 scFv sequence (aa)

<400> 565
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
20 25 30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
50 55 60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
65 70 75 80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
85 90 95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125
Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu
130 135 140
Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Ser Cys Lys Ser Ser Gln
145 150 155 160
Ser Val Leu Asn Ser Ser Asn Asn Lys Asn Tyr Val Ala Trp Tyr Lys
165 170 175
Gln Lys Pro Gly Gln Pro Pro Lys Leu Val Ile Ser Trp Ala Ser Thr
180 185 190
Arg Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
195 200 205
Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val
210 215 220
Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Tyr Thr Phe Gly Gln Gly
225 230 235 240
Thr Lys Leu Asp Ile Lys
245

<210> 566
 <211> 241
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-32 scFv sequence (aa)

<400> 566
 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95
 Ala Lys Val Asp Gly Pro Pro Ser Phe Asp Ile Trp Gly Gln Gly Thr
 100 105 110
 Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115 120 125
 Gly Gly Gly Gly Ser Gln Thr Val Val Thr Gln Pro Pro Ser Val Ser
 130 135 140
 Val Ala Pro Gly Gln Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile
 145 150 155 160
 Gly Ser Lys Gly Val His Trp Tyr Arg Gln Arg Pro Gly Gln Ala Pro
 165 170 175
 Glu Val Val Ile Tyr Asp Asp Ser Asp Arg Pro Ser Gly Val Pro Asp
 180 185 190
 Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Val Arg
 195 200 205
 Gly Val Glu Ala Gly Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp
 210 215 220
 Ser Ser Ser Asp His Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val
 225 230 235 240
 Leu

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<210> 567
 <211> 240
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-33 scFv sequence (aa)

<400> 567
 Gln Val Gln Leu Val Gln 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Gly Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95
 Ala Arg Glu Ala Asp Ser Ser Ala Asp Tyr Trp Gly Gln Gly Thr Leu
 100 105 110
 Val Asn Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 115 120 125
 Gly Gly Gly Ser Gln Pro Val Leu Thr Gln Pro Pro Ser Val Ser Val
 130 135 140
 Ala Pro Gly Lys Thr Ala Met Ile Thr Cys Gly Gly Asn Asn Ile Gly
 145 150 155 160
 Phe Lys Gly Val Gln Trp Tyr Gln Gln Lys Thr Gly Gln Ala Pro Val
 165 170 175
 Leu Val Val Tyr Asp Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg
 180 185 190
 Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg
 195 200 205
 Val Glu Ala Gly Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser
 210 215 220
 Ala Ser Asp His Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 225 230 235 240

<210> 568
 <211> 245
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-34 scFv sequence (aa)

<400> 568

```

Thr Gly Gln Leu Val Gln 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 Asp 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 Gly 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 Asn Ser 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 Asp Leu Gly Pro Asp Tyr Asp Pro Asp Ala Phe Asp Ile Trp
100          105          110
Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115          120          125
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser
130          135          140
Pro Ala Thr Leu Ser Leu Ser Pro Gly Asp Arg Ala Thr Leu Ser Cys
145          150          155          160
Arg Ala Ser Gln Ser Ile Ser Asn Tyr Leu Ala Trp Tyr Gln Gln Lys
165          170          175
Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Asp Ala Ser Asn Arg Ala
180          185          190
Thr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
195          200          205
Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr
210          215          220
Cys Gln Gln Arg Ser Asn Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr
225          230          235          240
Lys Leu Asp Ile Lys
                245

```

<210> 569

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-35 scFv sequence (aa)

<400> 569

```

Glu Val Gln Leu Val Gln 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 Asp Tyr
 20          25          30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35          40          45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85          90          95
Ala Arg Val Asp Gly Asp Tyr Asp Asp Tyr Trp Gly Gln Gly Thr Leu
100          105          110
Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly
115          120          125
Gly Gly Gly Ser Asn Phe Met Leu Thr Gln Pro Pro Ser Val Ser Val
130          135          140
Ala Pro Gly Gln Thr Ala Arg Ile Thr Cys Gly Ala Asn Asn Ile Gly
145          150          155          160
Ser Lys Ser Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Met
165          170          175
Leu Val Val Tyr Asp Asp Asp Asp Arg Pro Ser Gly Ile Pro Glu Arg
180          185          190
Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Gly
195          200          205
Val Glu Ala Gly Asp Glu Ala Asp Tyr Phe Cys His Leu Trp Asp Arg
210          215          220
Ser Arg Asp His Tyr Val Phe Gly Thr Gly Thr Lys Leu Asp Ile Lys
225          230          235          240

```

<210> 570

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-36 scFv sequence (aa)

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<400> 570

```

Gln Val Gln Leu Val Gln 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 Asp Tyr
 20           25           30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35           40           45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85           90           95
Ala Arg Val Asp Gly Asp Tyr Val Asp Asp Tyr Trp Gly Gln Gly Thr
 100          105          110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115          120          125
Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Glu Pro Ser Leu Thr
 130          135          140
Val Ser Pro Gly Glu Thr Val Thr Leu Thr Cys Gly Ser Ser Thr Gly
 145          150          155          160
Pro Val Thr Ser Ala His Ser Pro Ser Trp Phe Gln Lys Lys Pro Gly
 165          170          175
Gln Ala Pro Thr Thr Leu Ile Tyr Glu Thr Thr Asn Arg His Ser Trp
 180          185          190
Thr Pro Ala Arg Phe Ser Gly Ser Leu Leu Gly Gly Lys Ala Ala Leu
 195          200          205
Thr Leu Ser Gly Ala Gln Pro Glu Asp Glu Ala Asp Tyr Tyr Cys Leu
 210          215          220
Leu Ser Ser Gly Asp Ala Arg Met Val Phe Gly Gly Gly Thr Lys Leu
 225          230          235          240
Thr Val Leu

```

<210> 571

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-37 scFv sequence (aa)

<400> 571

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Glu	Val	Gln	Leu	Val	Gln	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	Asp	Tyr
			20					25					30		
Tyr	Met	Ser	Trp	Ile	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
	35						40					45			
Ser	Tyr	Ile	Ser	Ser	Ser	Gly	Ser	Thr	Ile	Tyr	Tyr	Ala	Asp	Ser	Val
	50					55					60				
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Ser	Ser	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	Val	Asp	Gly	Asp	Tyr	Val	Asp	Asp	Tyr	Trp	Gly	Gln	Gly	Thr
			100					105					110		
Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser
		115					120					125			
Gly	Gly	Gly	Gly	Ser	Gln	Leu	Val	Leu	Thr	Gln	Glu	Pro	Ser	Leu	Thr
		130				135					140				
Val	Ser	Pro	Gly	Gly	Thr	Val	Thr	Leu	Thr	Cys	Gly	Ser	Ser	Thr	Gly
145					150					155					160
Ala	Val	Thr	Asn	Gly	His	Ser	Pro	Tyr	Trp	Phe	Gln	Gln	Lys	Pro	Gly
			165						170					175	
Gln	Ala	Pro	Arg	Thr	Leu	Ile	Tyr	Asp	Thr	Thr	Asn	Arg	His	Ser	Trp
			180					185					190		
Thr	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Leu	Leu	Gly	Gly	Lys	Ala	Ala	Leu
		195					200					205			
Thr	Leu	Ser	Gly	Ala	Gln	Pro	Glu	Asp	Glu	Ala	Glu	Tyr	Tyr	Cys	Ser
	210					215					220				
Leu	Ser	His	Ala	Gly	Asp	Arg	Val	Phe	Phe	Gly	Gly	Gly	Thr	Lys	Leu
225					230					235					240
Thr	Val	Leu													

<210> 572

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-38 scFv sequence (aa)

<400> 572

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

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```

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr
    20                25                30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
    35                40                45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
    85                90                95
Ala Arg Val Asp Gly Asp Tyr Val Asp Asp Tyr Trp Gly Gln Gly Thr
    100               105               110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
    115               120               125
Gly Gly Gly Gly Ser Gln Ala Val Leu Thr Gln Glu Pro Ser Leu Thr
    130               135               140
Val Ser Pro Gly Gly Thr Val Thr Leu Thr Cys Gly Ser Ser Thr Gly
    145               150               155               160
Ala Val Thr Asn Gly His Ser Pro Tyr Trp Phe Gln Gln Lys Pro Gly
    165               170               175
Gln Ala Pro Arg Thr Leu Ile Tyr Asp Thr Asn Asn Arg His Ser Trp
    180               185               190
Thr Pro Ala Arg Phe Ser Gly Ser Leu Leu Gly Gly Lys Ala Ala Leu
    195               200               205
Thr Leu Ser Gly Ala Gln Pro Glu Asp Glu Ala Asp Tyr Phe Cys Leu
    210               215               220
Leu Ser Tyr Ser Asp Ala Arg Leu Ala Phe Gly Gly Gly Thr Lys Leu
    225               230               235               240
Thr Val Leu

```

<210> 573

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-39 scFv sequence (aa)

<220>

<221> VARIANT

<222> 141

<223> Xaa = any amino acid

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<220>

<221> VARIANT

<222> 171

<223> Xaa = any amino acid

<400> 573

Gln	Val	Gln	Leu	Val	Gln	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	Asp	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	Gly	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	Asn	Ser	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	Asp	Leu	Gly	Pro	Pro	Tyr	Gly	Asp	Asp	Ala	Phe	Asp	Ile	Trp
		100						105					110		
Gly	Gln	Gly	Thr	Met	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly
	115						120					125			
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Asp	Ile	Gln	Xaa	Thr	Gln	Ser
	130					135					140				
Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys
145					150					155					160
Arg	Ala	Ser	Gln	Gly	Ile	Arg	Tyr	Glu	Leu	Xaa	Trp	Tyr	Gln	Gln	Lys
			165						170					175	
Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile	Tyr	Ala	Ala	Ser	Thr	Leu	Gln
		180						185					190		
Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe
	195						200					205			
Ala	Leu	Thr	Ile	Arg	Ser	Leu	Gln	Pro	Glu	Asp	Phe	Ala	Thr	Tyr	Tyr
	210					215					220				
Cys	Leu	Gln	His	Asn	Ser	Tyr	Pro	Leu	Thr	Phe	Gly	Arg	Gly	Thr	Lys
225				230						235					240
Leu	Glu	Ile	Lys												

<210> 574

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

354246_1.txt

<220>

<223> BCMA-40 scFv sequence (aa)

<400> 574

```

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 Asp Tyr
 20           25           30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35           40           45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85           90           95
Ala Lys Val Asp Gly Asp Tyr Thr Glu Asp Tyr Trp Gly Gln Gly Thr
 100          105          110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115          120          125
Gly Gly Gly Gly Ser Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser
 130          135          140
Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Ser Ser Ser
 145          150          155          160
Asp Val Ser Lys Tyr Asn Leu Val Ser Trp Tyr Gln Gln Pro Pro Gly
 165          170          175
Lys Ala Pro Lys Leu Ile Ile Tyr Asp Val Asn Lys Arg Pro Ser Gly
 180          185          190
Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Thr Leu
 195          200          205
Thr Ile Ser Gly Leu Gln Gly Asp Asp Glu Ala Asp Tyr Tyr Cys Cys
 210          215          220
Ser Tyr Gly Gly Ser Arg Ser Tyr Val Phe Gly Thr Gly Thr Lys Leu
 225          230          235          240
Thr Val Leu

```

<210> 575

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-41 scFv sequence (aa)

354246_1.txt

<400> 575

Gln	Val	Gln	Leu	Val	Gln	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	Asp	Tyr
		20						25					30		
Tyr	Met	Ser	Trp	Ile	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
	35					40						45			
Ser	Tyr	Ile	Ser	Ser	Ser	Gly	Asn	Thr	Ile	Tyr	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	Val	Tyr	Tyr	Cys
			85						90					95	
Ala	Lys	Val	Asp	Gly	Asp	Tyr	Val	Asp	Asp	Tyr	Trp	Gly	Gln	Gly	Thr
			100					105					110		
Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser
		115					120					125			
Gly	Gly	Gly	Gly	Ser	Gln	Pro	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser
	130					135					140				
Gly	Thr	Pro	Gly	Gln	Arg	Val	Thr	Ile	Pro	Cys	Ser	Gly	Ser	Ser	Ser
145					150					155					160
Asn	Ile	Gly	Gly	Asn	Ser	Val	Asp	Trp	Phe	Gln	Glu	Val	Pro	Gly	Thr
				165				170						175	
Ala	Pro	Lys	Leu	Leu	Ile	Tyr	Ala	Asn	Asp	Arg	Arg	Pro	Ser	Gly	Val
			180					185					190		
Pro	Asp	Arg	Phe	Ser	Gly	Thr	Lys	Ser	Gly	Thr	Ser	Ala	Ser	Leu	Ala
		195					200					205			
Ile	Arg	Gly	Leu	Gln	Ser	Asp	Asp	Asp	Ala	His	Tyr	Tyr	Cys	Glu	Ser
	210					215					220				
Trp	Asp	Asp	Ala	Leu	Asn	Gly	His	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu
225					230					235					240
Thr	Val	Leu													

<210> 576

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-42 scFv sequence (aa)

<400> 576

354246_1.txt

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
1				5				10						15	
Ser	Leu	Arg	Leu	Ser	Cys	Thr	Ala	Ser	Gly	Phe	Thr	Phe	Gly	Asp	Tyr
			20					25					30		
Ala	Met	Ser	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			
Gly	Phe	Ile	Arg	Ser	Lys	Ala	Tyr	Gly	Gly	Thr	Thr	Glu	Tyr	Ala	Ala
	50				55					60					
Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asp	Ser	Lys	Ser	Ile
65				70					75				80		
Ala	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Lys	Thr	Glu	Asp	Thr	Ala	Val	Tyr
				85					90				95		
Tyr	Cys	Ala	Ala	Trp	Ser	Ala	Pro	Thr	Asp	Tyr	Trp	Gly	Gln	Gly	Thr
		100					105					110			
Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser
		115				120						125			
Gly	Gly	Gly	Gly	Ser	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Leu	Val
	130				135						140				
Ser	Ala	Ser	Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln
145				150					155					160	
Gly	Ile	Gly	Asn	Gly	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala
			165				170						175		
Pro	Lys	Leu	Leu	Leu	Phe	Ala	Ala	Ser	Arg	Leu	Glu	Ser	Gly	Val	Pro
		180					185						190		
Ser	Arg	Phe	Ser	Gly	Ser	Arg	Ser	Gly	Thr	Asp	Tyr	Thr	Leu	Thr	Ile
	195				200							205			
Ser	Ser	Leu	Gln	Pro	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Tyr
	210				215						220				
Val	Glu	Asp	Ala	Leu	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Asp	Ile	Lys
225				230					235					240	

<210> 577

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-52 VH (aa)

<400> 577

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

354246_1.txt

```

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

```

<210> 578

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-44 scFv sequence (aa)

<400> 578

```

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
  1           5           10           15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
          20           25           30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35           40           45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
          50           55           60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
  65           70           75           80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
          85           90           95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
          100          105          110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
          115          120          125
Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu
          130          135          140
Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln
  145          150          155          160
Asn Leu Leu Tyr Ser Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln
          165          170          175

```

354246_1.txt

```

Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr
    180                      185                      190
Arg Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
    195                      200                      205
Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val
    210                      215                      220
Tyr Tyr Cys Gln Gln Tyr Tyr Ser Ser Pro Tyr Thr Phe Gly Gln Gly
    225                      230                      235                      240
Thr Lys Leu Glu Ile Lys
                      245

```

<210> 579

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-45 scFv sequence (aa)

<400> 579

```

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1          5          10          15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
    20          25          30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
    35          40          45
Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
    50          55          60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
    65          70          75          80
Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
    85          90          95
Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
    100         105         110
Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
    115         120         125
Gly Gly Gly Gly Ser Ala Ile Arg Met Thr Gln Ser Pro Ser Ser Leu
    130         135         140
Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln
    145         150         155         160
Gly Ile Gly Arg Ser Leu Ala Trp Tyr Lys Gln Lys Pro Gly Gly Val
    165         170         175
Pro Gln Leu Leu Ile His Asp Ala Ser Ser Leu Arg Ser Gly Val Pro
    180         185         190

```

354246_1.txt

Ser	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile
		195					200					205			
Ser	Gly	Val	Gln	Ser	Glu	Asp	Ser	Ala	Thr	Tyr	His	Cys	Gln	Gln	Leu
	210					215					220				
Asn	Gly	Tyr	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Asp	Ile	Lys
225					230					235					240

<210> 580
 <211> 241
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-47 scFv sequence (aa)

<400> 580

Gln	Val	Gln	Leu	Leu	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	Asp	Tyr
		20					25					30			
Tyr	Met	Ser	Trp	Ile	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
	35					40					45				
Ser	Tyr	Ile	Ser	Ser	Ser	Gly	Ser	Thr	Ile	Tyr	Tyr	Ala	Asp	Ser	Val
	50					55				60					
Lys	Gly	Asp	Ser	Pro	Ser	Pro	Gly	Thr	Thr	Pro	Lys	Asn	Ser	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	Lys	Val	Asp	Gly	Pro	Pro	Ser	Phe	Asp	Ile	Trp	Arg	Gln	Gly	Thr
			100					105					110		
Met	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Gly	Ser
	115					120				125					
Gly	Gly	Gly	Gly	Ser	Gln	Ala	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser
	130				135					140					
Val	Ala	Pro	Gly	Lys	Thr	Ala	Thr	Ile	Thr	Cys	Gly	Gly	Asn	Asn	Ile
145					150					155				160	
Gly	Ser	Lys	Ser	Val	His	Trp	Tyr	Gln	Arg	Lys	Pro	Gly	Gln	Gly	Pro
			165					170					175		
Val	Val	Val	Ile	Gln	Tyr	Asp	Thr	Asp	Arg	Pro	Ser	Gly	Ile	Pro	Glu
			180					185					190		
Arg	Phe	Ser	Gly	Ser	Lys	Ser	Gly	Asp	Thr	Ala	Ser	Leu	Thr	Ile	Ser
	195					200						205			
Gly	Val	Glu	Ala	Gly	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Leu	Trp	Asp
	210					215					220				

354246_1.txt

Ser Asp Ser Asp Asp Phe Ala Phe Gly Thr Gly Thr Lys Leu Thr Val
 225 230 235 240
 Leu

<210> 581
 <211> 241
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-48 scFv sequence (aa)

<400> 581
 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 Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95
 Ala Lys Val Asp Gly Pro Pro Ser Phe Asp Ile Trp Gly Gln Gly Thr
 100 105 110
 Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
 115 120 125
 Gly Gly Gly Gly Ser Gln Pro Val Leu Thr Gln Pro Pro Ser Val Ser
 130 135 140
 Val Ala Pro Gly Lys Thr Ala Thr Ile Thr Cys Gly Gly Asn Asn Ile
 145 150 155 160
 Gly Ser Lys Ser Val His Trp Tyr Gln Arg Lys Pro Gly Gln Gly Pro
 165 170 175
 Val Val Val Ile Gln Tyr Asp Thr Asp Arg Pro Ser Gly Ile Pro Glu
 180 185 190
 Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser
 195 200 205
 Arg Val Glu Ala Gly Asp Glu Gly Asp Tyr Tyr Cys Gln Val Trp Asp
 210 215 220
 Ser Ser Ser Asp His Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val
 225 230 235 240

Leu

<210> 582

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-49 scFv sequence (aa)

<400> 582

```

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 Asp Tyr
      20           25           30
Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35           40           45
Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
      85           90           95
Ala Lys Val Asp Gly Pro Pro Ser Phe Asp Ile Trp Gly Gln Gly Thr
      100          105          110
Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
      115          120          125
Gly Gly Gly Gly Ser Leu Pro Val Leu Thr Gln Pro Pro Ser Val Ser
      130          135          140
Val Ala Pro Gly Lys Thr Ala Arg Ile Thr Cys Gly Gly Asp Gln Ile
      145          150          155          160
Gly Arg Lys Ser Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
      165          170          175
Val Leu Val Met Ser Tyr Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu
      180          185          190
Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser
      195          200          205
Arg Val Glu Ala Gly Asp Glu Ala Ala Tyr Tyr Cys Gln Val Trp Asp
      210          215          220
Ser Ser Thr Gly Gln Tyr Val Val Phe Gly Gly Gly Thr Lys Leu Thr
      225          230          235          240
Val Leu

```

<210> 583
 <211> 241
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-51 scFv sequence (aa)

<400> 583
 Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
 20 25 30
 Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Gly Phe Ile Arg Ser Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala
 50 55 60
 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
 65 70 75 80
 Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 Tyr Cys Ala Ala Trp Ser Ala Pro Thr Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115 120 125
 Gly Gly Gly Gly Ser Ala Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu
 130 135 140
 Ser Ala Ser Val Gly Asp Arg Val Ala Ile Thr Cys Arg Ala Ser Gln
 145 150 155 160
 Asn Ile Gly Asp Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala
 165 170 175
 Pro Lys Leu Leu Ile Phe Gly Ala Ser Ile Leu Glu Ser Gly Val Pro
 180 185 190
 Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 195 200 205
 Ser Ser Leu Gln Pro Glu Asp Val Ala Val Tyr Tyr Cys Gln Lys Tyr
 210 215 220
 Asp Gly Ala Pro Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 225 230 235 240
 Lys

354246_1.txt

<210> 584
<211> 729
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-41 scFv sequence (nt)

<400> 584
cagggtgcagc tgggtgcaatc tgggggaggc ttgggtcaagc ctggagggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgagctggat ccgccaggct 120
ccagggaagg ggctggagtg ggtttcatatc attagtagta gtggtataac catatactac 180
gcagactctg taaagggccg attcaccatc tccagggaca acgcaaaaaa ctcactgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gaaagtggac 300
ggtgactacg tcgatgacta ctggggccag ggaaccctgg tcaccgtctc ctcagggtgga 360
ggcgggttcag gcggagggtg ctctggcggg ggccggatcgc agcctgtgct gactcagcca 420
ccctcagtgt ctgggacccc cgggcagagg gtcaccatcc cttgttctgg aagcagctcc 480
aacatcggag gtaactctgt agactggttc caggagggtcc cagggacggc ccccaaaactc 540
ctcatctacg ctaatgatcg gcggccctcg ggtgtccctg accgcttctc tggcaccaag 600
tcgggcacct cagcctccct ggccatcagg gggctccagt ctgacgatga cgctcattat 660
tactgtgaat cctgggacga tgccctgaac ggtcacgtgt tcggcggagg gaccaagctg 720
accgtccta 729

<210> 585
<211> 243
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA-C1 VH-VL scFv (aa)

<400> 585
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15
Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
20 25 30
Ser Ile Asn Trp Val Lys Arg Ala Pro Gly Lys Gly Leu Lys Trp Met
35 40 45
Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe
50 55 60
Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

354246_1.txt

```

Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala Thr Tyr Phe Cys
      85                      90                      95
Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
      100                    105                    110
Val 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 Pro Ser Leu Ala
      130                    135                    140
Met Ser Leu Gly Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser
      145                    150                    155                    160
Val Thr Ile Leu Gly Ser His Leu Ile His Trp Tyr Gln Gln Lys Pro
      165                    170                    175
Gly Gln Pro Pro Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr
      180                    185                    190
Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr
      195                    200                    205
Leu Thr Ile Asp Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys
      210                    215                    220
Leu Gln Ser Arg Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu
      225                    230                    235                    240
Glu Ile Lys

```

<210> 586

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-C2 VL-VH scFv (aa)

<400> 586

```

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

```

354246_1.txt

Thr Phe Gly Gly Gly Thr Lys Leu Asp Ile Lys Gly Gly Gly Gly Ser
100 105 110
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Gln Leu Val Gln
115 120 125
Ser Gly Pro Asp Leu Lys Lys Pro Gly Glu Thr Val Lys Leu Ser Cys
130 135 140
Lys Ala Ser Gly Tyr Thr Phe Thr Asn Phe Gly Met Asn Trp Val Lys
145 150 155 160
Gln Ala Pro Gly Lys Gly Phe Lys Trp Met Ala Trp Ile Asn Thr Tyr
165 170 175
Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe Lys Gly Arg Phe Ala Phe
180 185 190
Ser Val Glu Thr Ser Ala Thr Thr Ala Tyr Leu Gln Ile Asn Asn Leu
195 200 205
Lys Thr Glu Asp Thr Ala Thr Tyr Phe Cys Ala Arg Gly Glu Ile Tyr
210 215 220
Tyr Gly Tyr Asp Gly Gly Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val
225 230 235 240
Thr Val Ser Ala

<210> 587

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-52 VL (aa)

<400> 587

Ser Tyr Glu Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1 5 10 15
Arg Val Thr Met Ser Cys Ser Gly Thr Ser Ser Asn Ile Gly Ser His
20 25 30
Ser Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45
Ile Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60
Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65 70 75 80
Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Gly Ser Leu
85 90 95
Asn Gly Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
100 105 110

<210> 588
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-55 CDR-H1 (aa)

<400> 588
 Gly Tyr Thr Phe Ile Asp Tyr Tyr
 1 5

<210> 589
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-55 CDR-H2 (aa)

<400> 589
 Ile Asn Pro Asn Ser Gly Gly Thr
 1 5

<210> 590
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-55 CDR-H3 (aa)

<400> 590
 Ala Arg Ser Gln Arg Asp Gly Tyr Met Asp Tyr
 1 5 10

<210> 591
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> BCMA-55 CDR-L1 (aa)

<400> 591
 Ile Ser Cys Thr Gly Thr Ser Ser Asp
 1 5

<210> 592
 <211> 3
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<220>
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<220>
 <223> BCMA-55 CDR-L2 (aa)

<400> 592
 Glu Asp Ser
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<210> 593
 <211> 10
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<220>
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<220>
 <223> BCMA-55 CDR-L3 (aa)

<400> 593
 Ser Ser Asn Thr Arg Ser Ser Thr Leu Val
 1 5 10

<210> 594
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <223> BCMA-55 VH (aa)

<400> 594
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Met Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Leu Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ile Asp Tyr
 20 25 30
 Tyr Val Tyr Trp Met Arg Gln Ala Pro Gly Gln Gly Leu Glu Ser Met
 35 40 45
 Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg Ser Gln Arg Asp Gly Tyr Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Leu Val Thr Val Ser Ser
 115

<210> 595
 <211> 105
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <223> BCMA-55 VL (aa)

<400> 595
 Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Ala Ser Pro Gly Gln
 1 5 10 15
 Ser Ile Ala Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Trp Tyr
 20 25 30

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

<210> 596
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> T2A

<400> 596
Leu Glu Gly Gly Gly Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp
1 5 10 15
Val Glu Glu Asn Pro Gly Pro Arg
20

<210> 597
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> T2A

<400> 597
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15
Gly Pro

<210> 598
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 <212> PRT
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<220>
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<220>
 <223> P2A

<400> 598
 Gly Ser Gly Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val
 1 5 10 15
 Glu Glu Asn Pro Gly Pro
 20

<210> 599
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> P2A

<400> 599
 Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
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 Pro Gly Pro

<210> 600
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
 <223> E2A

<400> 600

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Gln Cys Thr Asn Tyr Ala Leu Leu Lys Leu Ala Gly Asp Val Glu Ser
 1 5 10 15
 Asn Pro Gly Pro
 20

<210> 601
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> F2A

<400> 601
 Val Lys Gln Thr Leu Asn Phe Asp Leu Leu Lys Leu Ala Gly Asp Val
 1 5 10 15
 Glu Ser Asn Pro Gly Pro
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<210> 602
 <211> 357
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<220>
 <223> EGFRT

<400> 602
 Met Leu Leu Leu Val Thr Ser Leu Leu Leu Cys Glu Leu Pro His Pro
 1 5 10 15
 Ala Phe Leu Leu Ile Pro Arg Lys Val Cys Asn Gly Ile Gly Ile Gly
 20 25 30
 Glu Phe Lys Asp Ser Leu Ser Ile Asn Ala Thr Asn Ile Lys His Phe
 35 40 45
 Lys Asn Cys Thr Ser Ile Ser Gly Asp Leu His Ile Leu Pro Val Ala
 50 55 60
 Phe Arg Gly Asp Ser Phe Thr His Thr Pro Pro Leu Asp Pro Gln Glu
 65 70 75 80
 Leu Asp Ile Leu Lys Thr Val Lys Glu Ile Thr Gly Phe Leu Leu Ile
 85 90 95

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Gln Ala Trp Pro Glu Asn Arg Thr Asp Leu His Ala Phe Glu Asn Leu
    100                      105                      110
Glu Ile Ile Arg Gly Arg Thr Lys Gln His Gly Gln Phe Ser Leu Ala
    115                      120                      125
Val Val Ser Leu Asn Ile Thr Ser Leu Gly Leu Arg Ser Leu Lys Glu
    130                      135                      140
Ile Ser Asp Gly Asp Val Ile Ile Ser Gly Asn Lys Asn Leu Cys Tyr
    145                      150                      155                      160
Ala Asn Thr Ile Asn Trp Lys Lys Leu Phe Gly Thr Ser Gly Gln Lys
    165                      170                      175
Thr Lys Ile Ile Ser Asn Arg Gly Glu Asn Ser Cys Lys Ala Thr Gly
    180                      185                      190
Gln Val Cys His Ala Leu Cys Ser Pro Glu Gly Cys Trp Gly Pro Glu
    195                      200                      205
Pro Arg Asp Cys Val Ser Cys Arg Asn Val Ser Arg Gly Arg Glu Cys
    210                      215                      220
Val Asp Lys Cys Asn Leu Leu Glu Gly Glu Pro Arg Glu Phe Val Glu
    225                      230                      235                      240
Asn Ser Glu Cys Ile Gln Cys His Pro Glu Cys Leu Pro Gln Ala Met
    245                      250                      255
Asn Ile Thr Cys Thr Gly Arg Gly Pro Asp Asn Cys Ile Gln Cys Ala
    260                      265                      270
His Tyr Ile Asp Gly Pro His Cys Val Lys Thr Cys Pro Ala Gly Val
    275                      280                      285
Met Gly Glu Asn Asn Thr Leu Val Trp Lys Tyr Ala Asp Ala Gly His
    290                      295                      300
Val Cys His Leu Cys His Pro Asn Cys Thr Tyr Gly Cys Thr Gly Pro
    305                      310                      315                      320
Gly Leu Glu Gly Cys Pro Thr Asn Gly Pro Lys Ile Pro Ser Ile Ala
    325                      330                      335
Thr Gly Met Val Gly Ala Leu Leu Leu Leu Val Val Ala Leu Gly
    340                      345                      350
Ile Gly Leu Phe Met
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<210> 603

<211> 335

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> EGFRT

<400> 603

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Ser	Ile	Asn	Ala	Thr	Asn	Ile	Lys	His	Phe	Lys	Asn	Cys	Thr	Ser	Ile
			20					25					30		
Ser	Gly	Asp	Leu	His	Ile	Leu	Pro	Val	Ala	Phe	Arg	Gly	Asp	Ser	Phe
	35						40					45			
Thr	His	Thr	Pro	Pro	Leu	Asp	Pro	Gln	Glu	Leu	Asp	Ile	Leu	Lys	Thr
	50					55					60				
Val	Lys	Glu	Ile	Thr	Gly	Phe	Leu	Leu	Ile	Gln	Ala	Trp	Pro	Glu	Asn
65					70					75					80
Arg	Thr	Asp	Leu	His	Ala	Phe	Glu	Asn	Leu	Glu	Ile	Ile	Arg	Gly	Arg
				85					90					95	
Thr	Lys	Gln	His	Gly	Gln	Phe	Ser	Leu	Ala	Val	Val	Ser	Leu	Asn	Ile
			100					105					110		
Thr	Ser	Leu	Gly	Leu	Arg	Ser	Leu	Lys	Glu	Ile	Ser	Asp	Gly	Asp	Val
	115						120					125			
Ile	Ile	Ser	Gly	Asn	Lys	Asn	Leu	Cys	Tyr	Ala	Asn	Thr	Ile	Asn	Trp
	130					135					140				
Lys	Lys	Leu	Phe	Gly	Thr	Ser	Gly	Gln	Lys	Thr	Lys	Ile	Ile	Ser	Asn
145					150					155					160
Arg	Gly	Glu	Asn	Ser	Cys	Lys	Ala	Thr	Gly	Gln	Val	Cys	His	Ala	Leu
			165						170					175	
Cys	Ser	Pro	Glu	Gly	Cys	Trp	Gly	Pro	Glu	Pro	Arg	Asp	Cys	Val	Ser
			180					185					190		
Cys	Arg	Asn	Val	Ser	Arg	Gly	Arg	Glu	Cys	Val	Asp	Lys	Cys	Asn	Leu
	195						200					205			
Leu	Glu	Gly	Glu	Pro	Arg	Glu	Phe	Val	Glu	Asn	Ser	Glu	Cys	Ile	Gln
	210					215					220				
Cys	His	Pro	Glu	Cys	Leu	Pro	Gln	Ala	Met	Asn	Ile	Thr	Cys	Thr	Gly
225					230					235					240
Arg	Gly	Pro	Asp	Asn	Cys	Ile	Gln	Cys	Ala	His	Tyr	Ile	Asp	Gly	Pro
			245						250					255	
His	Cys	Val	Lys	Thr	Cys	Pro	Ala	Gly	Val	Met	Gly	Glu	Asn	Asn	Thr
			260					265						270	
Leu	Val	Trp	Lys	Tyr	Ala	Asp	Ala	Gly	His	Val	Cys	His	Leu	Cys	His
	275						280					285			
Pro	Asn	Cys	Thr	Tyr	Gly	Cys	Thr	Gly	Pro	Gly	Leu	Glu	Gly	Cys	Pro
	290					295					300				
Thr	Asn	Gly	Pro	Lys	Ile	Pro	Ser	Ile	Ala	Thr	Gly	Met	Val	Gly	Ala
305					310					315					320
Leu	Leu	Leu	Leu	Leu	Val	Val	Ala	Leu	Gly	Ile	Gly	Leu	Phe	Met	
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<210> 604

<211> 720

<212> DNA

<213> Artificial Sequence

354246_1.txt

<220>

<223> Synthetic

<220>

<223> BCMA-25 scFv sequence (nt)

<400> 604

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ccaggcaagg gcctggagtg ggtgggcttt atccgctcta aggcctacgg cggcaccaca 180
gagtatgccg ccagcgtgaa gggccgggtt accatcagcc gggacgactc taagagcatc 240
gcctacctgc agatgaactc tctgaagacc gaggacacag ccgtgtacta ttgctgcagca 300
tggagcgccc caaccgatta ttggggccag ggcaccctgg tgacagttag ctccggcggc 360
ggcggctctg gaggaggagg aagcggagga ggaggatccg acatccagat gacacagtcc 420
cctgcctttc tgtccgcctc tgtgggcgat agggtgaccg tgacatgtcg cgcctcccag 480
ggcatctcta actacctggc ctggtatcag cagaagcccg gcaatgcccc tcggctgctg 540
atctacagcg cctccaccct gcagagcgga gtgccctccc gggtcagagg aaccggctat 600
ggcacagagt tttctctgac catcgacagc ctgcagccag aggatttcgc cacatactat 660
tgtcagcagt cttacaccag ccggcagaca tttggccccg gcacaagact ggatatcaag 720
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<210> 605

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-26 scFv sequence (nt)

<400> 605

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agctgcgcag cctccggctt caccttttct gactactata tgagctggat caggcaggca 120
ccaggcaagg gcctggagtg ggtgtcttac atcagctcct ctggcagcac aatctactat 180
gccgactccg tgaagggcag gttcaccatc tctcgcgata acgccaagaa tagcctgtat 240
ctgcagatga actccctgcg ggccgaggat acagccgtgt actattgcgc caagggtggac 300
ggccccctt cttttgatat ctggggccag ggcacaatgg tgaccgtgag ctccggaggga 360
ggaggatccg gcggaggagg ctctggcggc ggcggctcta gctatgtgct gaccagcca 420
ccatccgtgt ctgtggcacc tggacagaca gcaaggatca cctgtggagc aaacaatatc 480
ggcagcaagt ccgtgcactg gtaccagcag aagcctggcc aggcccaat gctggtggtg 540
tatgacgatg acgatcggcc cagcggcatc cctgagagat tttctggcag caactccggc 600
aataccgcca cactgaccat ctctggagtg gaggcaggcg acgaggcaga ttacttctgt 660
cacctgtggg accggagcag agatcactac gtgttcggca caggcaccaa gctgaccgtg 720
ctg 723
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<210> 606

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-52 scFv sequence (nt)

<400> 606

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tcctatgagc tgactcagcc accctcagcg tctgggaccc ccgggcagag ggtcaccatg 60
tcttgttctg gaaccagctc caacatcgga agtcactctg taaactggta ccagcagctc 120
ccaggaacgg cccccaact cctcatctat actaataatc agcggccctc aggggtccct 180
gaccgattct ctggctccaa gtctggcacc tcagcctccc tggccatcag tggcctccag 240
tctgaggatg aggctgatta ttactgtgca gcatgggatg gcagcctgaa tggctctggta 300
ttcggcggag ggaccaagct gaccgtccta gggtctagag gtggtggtgg tagcggcggc 360
ggcggctctg gtggtggtgg atccctcgag atggccgagg tgcagctggt gcagtctgga 420
gcagaggatga aaaagcccgg ggagtctctg aagatctcct gtaagggttc tggatacagc 480
tttaccagct actggatcgg ctgggtgctg cagatgcccg ggaaaggcct ggagtggatg 540
gggatcatct atcctggatga ctctgatacc agatacagcc cgtccttcca aggccacgtc 600
accatctcag ctgacaagtc catcagcact gcctacctgc agtggagcag cctgaaggcc 660
tcggacaccg ccatgtatta ctgtgcgcgc tactctgggt ctttcgataa ctgggggtcaa 720
gggtactctg tgaccgtctc ctca                                     744

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<210> 607

<211> 732

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA-55 scFv sequence (nt)

<400> 607

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caatctgccc tgactcagcc tgcctccgtg tctgcgtctc ctggacagtc gatcgccatc 60
tcctgcactg gaaccagcag tgacgttggg tggatatcaac agcaccacagg caaagcccc 120
aaactcatga tttatgagga cagtaagcgg ccctcagggg tttctaatacg cttctctggc 180
tccaagtctg gcaacacggc ctccctgacc atctctgggc tccaggctga ggacgaggct 240
gattattact gcagctcaaa tacaagaagc agcactttgg tgttcggcgg agggaccaag 300
ctgaccgtcc taggttctag aggtggtggg ggtagcggcg gcggcggctc tgggtggtgg 360
ggatccctcg agatggccga agtgagctg gtgcagctg gggctgagat gaagaagcct 420
ggggcctcac tgaagctctc ctgcaaggct tctggataca cttcatcga ctactatgta 480
tactggatgc gacaggcccc tggacaaggg cttgagtcca tgggatggat caaccctaac 540
agtgggtggc caaactatgc acagaagttt cagggcaggg tcacatgac cagggacacg 600

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tccatcagca cagcctacat ggagctgagc aggctgagat ctgacgacac cgccatgtat 660
tactgtgcgc gctcccagcg tgacgggttac atggattact ggggtcaagg tactctgggtg 720
accgtctcct ca 732

<210> 608
<211> 10
<212> PRT
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<220>
<223> Synthetic

<220>
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<400> 608
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1 5 10

<210> 609
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<212> PRT
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<220>
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<220>
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<400> 609
Cys Ile Pro Cys Gln Leu Arg
1 5

<210> 610
<211> 7
<212> PRT
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<220>
<223> Synthetic

<220>
<223> BCMA epitope

<400> 610

Ser Val Thr Asn Ser Val Lys
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<210> 611
 <211> 7
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<220>
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<220>
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<400> 611
 Cys Ser Gln Asn Glu Tyr Phe
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<210> 612
 <211> 11
 <212> PRT
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<220>
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<220>
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<400> 612
 Leu Leu His Ala Cys Ile Pro Cys Gln Leu Arg
 1 5 10

<210> 613
 <211> 5
 <212> PRT
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<220>
 <223> Synthetic

<220>
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<400> 613

Gln Asn Glu Tyr Phe
1 5

<210> 614
<211> 6
<212> PRT
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<220>
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<220>
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<400> 614
Cys Ile Pro Cys Gln Leu
1 5

<210> 615
<211> 5
<212> PRT
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<220>
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<220>
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<400> 615
Cys Gln Arg Tyr Cys
1 5

<210> 616
<211> 5
<212> PRT
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<220>
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<400> 616

Met Leu Met Ala Gly
1 5

<210> 617
<211> 9
<212> PRT
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<220>
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<220>
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<400> 617
Gln Asn Glu Tyr Phe Asp Ser Leu Leu
1 5

<210> 618
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<223> BCMA epitope

<400> 618
Tyr Phe Asp Ser Leu
1 5

<210> 619
<211> 11
<212> PRT
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<220>
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<220>
<223> BCMA epitope

<400> 619

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Gln Leu Arg Cys Ser Ser Asn Thr Pro Pro Leu
1 5 10

<210> 620

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>

<223> BCMA epitope

<400> 620

Tyr Phe Asp Ser Leu Leu
1 5