

SEQUENCE LISTING

<110> Ganymed Pharmaceuticals GmbH et al.
 <120> Antibodies useful in cancer diagnosis
 <130> 342-99 PCT2
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 <160> 61
 <170> PatentIn version 3.5
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 <212> PRT
 <213> Homo sapiens
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Met Ala Ser Ala Gly Met Gln Ile Leu Gly Val Val Leu Thr Leu Leu
 1 5 10 15

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

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

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

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

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

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

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

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

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

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

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

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

Arg Gly Pro Ser Glu Tyr Pro Thr Lys Asn Tyr Val
 210 215 220

<210> 2
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 <213> Homo sapiens

<400> 2

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

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

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

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

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

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

Val Ala Ile Thr Gly Ala Gln Cys Thr Thr Cys Val Glu Asp Glu Gly
100 105 110

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

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

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

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

Gly Gly Gly Leu Leu Cys Cys Thr Cys Pro Pro Pro Gln Val Glu Arg
180 185 190

Pro Arg Gly Pro Arg Leu Gly Tyr Ser Ile Pro Ser Arg Ser Gly Ala
195 200 205

Ser Gly Leu Asp Lys Arg Asp Tyr Val
210 215

<210> 3
<211> 220
<212> PRT
<213> Homo sapiens

<400> 3

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

Trp Leu Gly Thr Ile Val Cys Cys Ala Leu Pro Met Trp Arg Val Ser
 20 25 30

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

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

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

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

Ala Leu Val Gly Ala Gln Cys Thr Asn Cys Val Gln Asp Asp Thr Ala
 100 105 110

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

Leu Leu Thr Leu Val Pro Val Ser Trp Ser Ala Asn Thr Ile Ile Arg
 130 135 140

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

Ala Gly Leu Tyr Val Gly Trp Ala Ala Ala Ala Leu Gln Leu Leu Gly
 165 170 175

Gly Ala Leu Leu Cys Cys Ser Cys Pro Pro Arg Glu Lys Lys Tyr Thr
 180 185 190

Ala Thr Lys Val Val Tyr Ser Ala Pro Arg Ser Thr Gly Pro Gly Ala
 195 200 205

Ser Leu Gly Thr Gly Tyr Asp Arg Lys Asp Tyr Val
 210 215 220

<210> 4
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 <400> 4

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

Gly Trp Leu Ala Val Met Leu Cys Cys Ala Leu Pro Met Trp Arg Val
 20 25 30

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

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

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

Arg Ala Leu Val Ile Ile Ser Ile Ile Val Ala Ala Leu Gly Val Leu
 85 90 95

Leu Ser Val Val Gly Gly Lys Cys Thr Asn Cys Leu Glu Asp Glu Ser
 100 105 110

Ala Lys Ala Lys Thr Met Ile Val Ala Gly Val Val Phe Leu Leu Ala
 115 120 125

Gly Leu Met Val Ile Val Pro Val Ser Trp Thr Ala His Asn Ile Ile
 130 135 140

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

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

Gly Gly Gly Leu Leu Cys Cys Asn Cys Pro Pro Arg Thr Asp Lys Pro
 180 185 190

Tyr Ser Ala Lys Tyr Ser Ala Ala Arg Ser Ala Ala Ala Ser Asn Tyr
 195 200 205

Val

<210> 5
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 <213> Mus musculus

<400> 5

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

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

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

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

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

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

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

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

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

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

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

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

Pro Arg His Tyr Met Ala Cys Tyr Ser Thr Ser Val Pro His Ser Arg
 195 200 205

Gly Pro Ser Glu Tyr Pro Thr Lys Asn Tyr Val
 210 215

<210> 6
 <211> 41
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 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 6

Leu Leu Cys Cys Thr Cys Pro Ser Gly Gly Ser Gln Gly Pro Ser His
 1 5 10 15

Tyr Met Ala Arg Tyr Ser Thr Ser Ala Pro Ala Ile Ser Arg Gly Pro
 20 25 30

Ser Glu Tyr Pro Thr Lys Asn Tyr Val
 35 40

<210> 7
 <211> 40
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 7

Leu Leu Cys Cys Ala Cys Ser Ser Gly Gly Thr Gln Gly Pro Arg His
 1 5 10 15

Tyr Met Ala Cys Tyr Ser Thr Ser Val Pro His Ser Arg Gly Pro Ser
 20 25 30

Glu Tyr Pro Thr Lys Asn Tyr Val
 35 40

<210> 8
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 8

Cys Thr Cys Pro Ser Gly Gly Ser Gln Gly Pro Ser His Tyr Met Ala
 1 5 10 15

Arg Tyr Ser Thr Ser Ala Pro Ala Ile Ser Arg Gly Pro Ser Glu Tyr
 20 25 30

Pro Thr Lys Asn Tyr Val
 35

<210> 9
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Peptide

<400> 9

Cys	Thr	Cys	Pro	Ser	Gly	Gly	Ser	Gln	Gly	Pro	Ser	His	Tyr
1				5					10				

<210> 10

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 10

Pro	Ser	Gly	Gly	Ser	Gln	Gly	Pro	Ser	His	Tyr	Met	Ala	Arg	Tyr
1				5					10					15

<210> 11

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 11

Ser	Gln	Gly	Pro	Ser	His	Tyr	Met	Ala	Arg	Tyr	Ser	Thr	Ser	Ala
1				5					10					15

<210> 12

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 12

Ser	His	Tyr	Met	Ala	Arg	Tyr	Ser	Thr	Ser	Ala	Pro	Ala	Ile	Ser
1				5					10					15

<210> 13
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 13

Ala Arg Tyr Ser Thr Ser Ala Pro Ala Ile Ser Arg Gly Pro Ser
 1 5 10 15

<210> 14
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 14

Thr Ser Ala Pro Ala Ile Ser Arg Gly Pro Ser Glu Tyr Pro Thr
 1 5 10 15

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

<220>
 <223> Peptide

<400> 15

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

<210> 16
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Peptide

<400> 16

Tyr	Met	Ala	Arg	Tyr	Ser	Thr	Ser	Ala	Pro	Ala	Ile	Ser	Arg	Gly
1				5					10					15

<210> 17

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 17

Arg	Tyr	Ser	Thr	Ser	Ala	Pro	Ala	Ile	Ser	Arg	Gly	Pro	Ser	Glu
1				5					10					15

<210> 18

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 18

Tyr	Ser	Thr	Ser	Ala	Pro	Ala	Ile	Ser	Arg	Gly	Pro	Ser	Glu	Tyr
1				5					10					15

<210> 19

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 19

Ser	Thr	Ser	Ala	Pro	Ala	Ile	Ser	Arg	Gly	Pro	Ser	Glu	Tyr	Pro
1				5					10					15

<210> 20
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 20

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

<210> 21
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 21

Ala	Pro	Ala	Ile	Ser	Arg	Gly	Pro	Ser	Glu	Tyr	Pro	Thr	Lys	Asn
1				5				10						15

<210> 22
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 22

Pro	Ala	Ile	Ser	Arg	Gly	Pro	Ser	Glu	Tyr	Pro	Thr	Lys	Asn	Tyr
1				5				10						15

<210> 23
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 23

Ile Ser Arg Gly Pro Ser Glu Tyr Pro Thr Lys Asn Tyr Val
1 5 10

<210> 24

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 24

Ser Arg Gly Pro Ser Glu Tyr Pro Thr Lys Asn Tyr Val
1 5 10

<210> 25

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 25

Arg Gly Pro Ser Glu Tyr Pro Thr Lys Asn Tyr Val
1 5 10

<210> 26

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 26

Gly Pro Ser Glu Tyr Pro Thr Lys Asn Tyr Val
1 5 10

<210> 27

<211> 10

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 27

Pro Ser Glu Tyr Pro Thr Lys Asn Tyr Val
 1 5 10

<210> 28
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 28

Ser Glu Tyr Pro Thr Lys Asn Tyr Val
 1 5

<210> 29
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 29

Glu Tyr Pro Thr Lys Asn Tyr Val
 1 5

<210> 30
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 30

Tyr Pro Thr Lys Asn Tyr Val
1 5

<210> 31
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide

<400> 31

Pro Thr Lys Asn Tyr Val
1 5

<210> 32
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide

<400> 32

Pro Thr Lys Asn Tyr
1 5

<210> 33
<211> 4
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<213> Artificial Sequence

<220>
<223> Peptide

<400> 33

Pro Thr Lys Asn
1

<210> 34
<211> 40
<212> PRT
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<223> Peptide

<400> 34

Leu	Cys	Cys	Thr	Cys	Pro	Ser	Gly	Gly	Ser	Gln	Gly	Pro	Ser	His	Tyr
1				5					10					15	

Met	Ala	Arg	Tyr	Ser	Thr	Ser	Ala	Pro	Ala	Ile	Ser	Arg	Gly	Pro	Ser
			20					25					30		

Glu	Tyr	Pro	Thr	Lys	Asn	Tyr	Val
		35				40	

<210> 35

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 35

Leu	Cys	Cys	Thr	Cys	Pro	Pro	Pro	Gln	Val	Glu	Arg	Pro	Arg	Gly	Pro
1				5					10					15	

Arg	Leu	Gly	Tyr	Ser	Ile	Pro	Ser	Arg	Ser	Gly	Ala	Ser	Gly	Leu	Asp
			20					25					30		

Lys	Arg	Asp	Tyr	Val
		35		

<210> 36

<211> 41

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 36

Leu Cys Cys Ser Cys Pro Pro Arg Glu Lys Lys Tyr Thr Ala Thr Lys
 1 5 10 15

Val Val Tyr Ser Ala Pro Arg Ser Thr Gly Pro Gly Ala Ser Leu Gly
 20 25 30

Thr Gly Tyr Asp Arg Lys Asp Tyr Val
 35 40

<210> 37
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 37

Leu Cys Cys Asn Cys Pro Pro Arg Thr Asp Lys Pro Tyr Ser Ala Lys
 1 5 10 15

Tyr Ser Ala Ala Arg Ser Ala Ala Ala Ser Asn Tyr Val
 20 25

<210> 38
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 38

Glu Tyr Pro Thr Lys Asn Tyr
 1 5

<210> 39
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Peptide

<400> 39

Arg Gly Pro Ser
1

<210> 40

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Antibody chain

<400> 40

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

Ser Val Arg Met Ser Cys Arg Thr Ser Gly Tyr Ile Phe Thr Thr Tyr
20 25 30

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

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

Arg Gly Lys Ala Ser Leu Thr Ala Val Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

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

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

Ser Ser

<210> 41
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Antibody chain

<400> 41

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

Gln Thr Ala Ser Ile Ser Cys Lys Ser Ser Gln Asn Leu Leu Tyr Ser
 20 25 30

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

Pro Lys Arg Leu Ile Tyr Leu Met Ser Lys Leu Asp Ser Gly Val Pro
 50 55 60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Trp Gln Gly
 85 90 95

Thr His Phe Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Asn Thr
 100 105 110

<210> 42
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Antibody chain

<400> 42

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

Ser Val Lys Met Ser Cys Arg Thr Ser Gly Tyr Thr Phe Thr Thr Tyr
20 25 30

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

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

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

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

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

Ser Ser

$\langle 210 \rangle$	43
$\langle 211 \rangle$	112
$\langle 212 \rangle$	PRT
$\langle 213 \rangle$	Artificial Sequence

<220>
<223> Antibody chain

<400> 43

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

Gln Thr Ala Ser Ile Ser Cys Lys Ser Ser Gln Asn Leu Leu Tyr Ser
20 25 30

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

Pro Lys Arg Leu Ile Tyr Leu Met Ser Lys Leu Asp Ser Gly Val Pro
 50 55 60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Trp Gln Gly
 85 90 95

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

<210> 44

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Antibody chain

<400> 44

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

Ser Val Lys Met Ser Cys Arg Thr Ser Gly Tyr Thr Phe Thr Thr Tyr
 20 25 30

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

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

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

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

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

Ser Ser

<210> 45
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Antibody chain

<400> 45

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

Gln Thr Ala Ser Ile Ser Cys Lys Ser Ser Gln Asn Leu Leu Tyr Ser
 20 25 30

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

Pro Lys Arg Leu Ile Tyr Leu Met Ser Lys Leu Glu Ser Gly Val Pro
 50 55 60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Trp Gln Gly
 85 90 95

Thr His Phe Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Ser
 100 105 110

<210> 46
 <211> 17

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 46

Cys	Arg	Asp	Phe	Tyr	Asn	Pro	Leu	Val	Ala	Glu	Ala	Gln	Lys	Arg	Glu
1				5					10					15	

Leu

<210> 47
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 47

Gly	Gly	Gly	Leu	Leu	Cys	Cys	Thr	Cys	Pro	Ser	Gly	Gly	Ser	Gln	Gly
1				5					10					15	

Pro	Ser	His	Tyr
			20

<210> 48
 <211> 21
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 48

Cys	Ala	Arg	Tyr	Ser	Thr	Ser	Ala	Pro	Ala	Ile	Ser	Arg	Gly	Pro	Ser
1				5					10					15	

Glu	Tyr	Pro	Thr	Lys
				20

<210> 49
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 49

Cys Cys Thr Cys Pro Ser Gly Gly Ser Gln Gly Pro Ser His Tyr Met
 1 5 10 15

Ala Arg Tyr Ser Thr Ser Ala Pro Ala Ile Ser Arg Gly Pro Ser Glu
 20 25 30

Tyr Pro Thr Lys Asn Tyr Val
 35

<210> 50
 <211> 61
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 50

Ala Lys Cys Thr Thr Cys Val Glu Glu Lys Asp Ser Lys Ala Arg Leu
 1 5 10 15

Val Leu Thr Ser Gly Ile Val Phe Val Ile Ser Gly Val Leu Thr Leu
 20 25 30

Ile Pro Val Cys Trp Thr Ala His Ala Ile Ile Arg Asp Phe Tyr Asn
 35 40 45

Pro Leu Val Ala Glu Ala Gln Lys Arg Glu Leu Gly Ala
 50 55 60

<210> 51
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Variable heavy chain CDR

<400> 51

Gly Tyr Ile Phe Thr Thr Tyr Trp
 1 5

<210> 52
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Variable heavy chain CDR

<400> 52

Ile Phe Pro Gly Asn Ser Asp Thr
 1 5

<210> 53
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Variable heavy chain CDR

<400> 53

Thr Arg Glu Phe Tyr Ala Thr
 1 5

<210> 54
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Variable light chain CDR

<400> 54

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

<210> 55

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Variable light chain CDR

<400> 55

Leu Met Ser
1

<210> 56

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Variable light chain CDR

<400> 56

Trp Gln Gly Thr His Phe Pro Trp Thr
1 5

<210> 57

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Variable heavy chain CDR

<400> 57

Gly Tyr Thr Phe Thr Thr Tyr Trp
1 5

<210> 58

<211> 8

<212> PRT
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<220>
 <223> Variable heavy chain CDR

<400> 58

Ile Tyr Pro Glu Asn Ser Asp Ala
 1 5

<210> 59
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Peptide

<400> 59

Glu Tyr Pro Thr Lys
 1 5

<210> 60
 <211> 6
 <212> PRT
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<220>
 <223> Peptide

<400> 60

Glu Tyr Pro Thr Lys Asn
 1 5

<210> 61
 <211> 6
 <212> PRT
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<220>
 <223> Peptide

<400> 61

Tyr	Pro	Thr	Lys	Asn	Tyr
1				5	