

3261-006PC01_SequenceListing_ST25
SEQUENCE LISTING

<110> TG THERAPEUTICS, INC.
RHIZEN PHARMACEUTICALS SA
FRANCAIS DU FRACTIONNEMENT ET DES BIOTECHNOLOGIES

<120> COMBINATION OF AN ANTI-CD20 ANTIBODY, PI3 KINASE-DELTA INHIBITOR,
AND ANTI-PD-1 OR ANTI-PD-L1 ANTIBODY FOR TREATING HEMATOLOGICAL
CANCERS

<130> 3261.00pc01

<150> 62/385,723
<151> 2016-09-09

<160> 88

<170> PatentIn version 3.5

<210> 1
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Gly Tyr Thr Phe Thr Ser Tyr Asn
1 5

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

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

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

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

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

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

Ala Arg Tyr Asp Tyr Asn Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr

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100

105

110

Ser Val Thr Val Ser Ser
115

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

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
35 40 45

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
115 120 125

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Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
130 135 140

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
180 185 190

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
195 200 205

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
210 215 220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
225 230 235 240

Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
245 250 255

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
260 265 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
275 280 285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
290 295 300

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
305 310 315 320

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Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 325 330

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Ser Ser Val Ser Tyr
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Ala Thr Ser
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Gln Gln Trp Thr Phe Asn Pro Pro Thr
 1 5

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3261-006PC01_SequenceListing_ST25

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<400> 9

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

Glu Lys Val Thr Met Thr Cys Arg Ala Ser Ser Ser Val Ser Tyr Met
 20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
 35 40 45

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

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

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Thr Phe Asn Pro Pro Thr
 85 90 95

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

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<400> 10

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln

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1	5	10	15
Leu	Lys	Ser	Gly
	Thr	Ala	Ser
	Val	Val	Cys
		Leu	Leu
		Asn	Asn
		Phe	Tyr
Pro	Arg	Glu	Ala
	Lys	Val	Gln
	Trp	Lys	Val
	Asp	Asn	Ala
		Leu	Gln
		Ser	
Gly	Asn	Ser	Gln
	Glu	Ser	Val
	Thr	Glu	Gln
	Asp	Ser	Lys
		Asp	Ser
		Thr	
Tyr	Ser	Leu	Ser
	Ser	Thr	Leu
	Thr	Leu	Ser
	Lys	Ala	Asp
	Tyr	Glu	Lys
His	Lys	Val	Tyr
	Ala	Cys	Glu
	Val	Thr	His
	Gln	Gly	Leu
	Ser	Ser	Pro
Val	Thr	Lys	Ser
	Phe	Asn	Arg
	Gly	Glu	Cys

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Gly	Thr	Phe	Ser	Arg	Ser	Ala	Ile	Ser
1			5					

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3261-006PC01_SequenceListing_ST25

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Gly Thr Phe Ser Gly Tyr Ala Ile Ser
1 5

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Gly Thr Phe Trp Arg Tyr Ala Ile Ser
1 5

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Gly Thr Phe Gly Ser Tyr Ala Ile Ser
1 5

<210> 15

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Gly Thr Phe Gly Thr Tyr Ala Ile Ser
1 5

3261-006PC01_SequenceListing_ST25

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Gly Thr Phe Ser Pro Lys Ala Ile Ser
1 5

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<400> 17

Tyr Thr Leu Ser Ser His Gly Ile Thr
1 5

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Gly Thr Phe Ser Ser Tyr Ala Ile Ser
1 5

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<400> 19

Val	Ile	Ile	Pro	Ala	Phe	Gly	Glu	Ala	Asn	Tyr	Ala	Gln	Lys	Phe	Gln
1				5					10					15	

Gly

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

Gly

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<400> 21

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

Gly

3261-006PC01_SequenceListing_ST25

<210> 22
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Gly	Ile	Tyr	Pro	Ala	Phe	Gly	Thr	Ala	Asn	Tyr	Ala	Gln	Lys	Phe	Gln
1				5				10						15	

Gly

<210> 23
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<400> 23

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

Gly

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Val	Ile	Ile	Pro	Ile	Phe	Gly	Pro	Ala	Asn	Tyr	Ala	Gln	Lys	Phe	Gln
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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1 5 10 15

Gly

<210> 25
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Trp Ile Ser Ala His Ser Gly His Ala Ser Asn Ala Gln Lys Val Glu
1 5 10 15

Asp

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<400> 26

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

Gly

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Ala	Arg	Gly	Arg	Gln	Met	Phe	Gly	Ala	Gly	Ile	Asp	Phe
1				5					10			

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<400> 28

Ala	Arg	Val	Trp	Arg	Ala	Leu	Tyr	His	Gly	Met	Asp	Val
1				5					10			

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<400> 29

Ala	Arg	Val	His	Ala	Ala	Leu	Tyr	His	Gly	Met	Asp	Val
1				5					10			

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<400> 30

Ala	Arg	Val	His	Ala	Ala	Leu	Tyr	Tyr	Gly	Met	Asp	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1 5 10

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

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<400> 33

Glu Asp Asn Gln Arg Pro Ser
1 5

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<400> 34

Asp Asp Ser Asp Arg Pro Ser
1 5

<210> 35

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<400> 35

Gln Ser Tyr Asp Ser Asn Asn Arg His Val Ile
1 5 10

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<211> 11

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<400> 36

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

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3261-006PC01_SequenceListing_ST25

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly
20 25

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<400> 38

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly
20 25

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Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
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3261-006PC01_SequenceListing_ST25

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Arg	Val	Thr	Ile	Thr	Ala	Asp	Lys	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
			20					25					30

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

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<400> 42

Asn	Phe	Met	Leu	Thr	Gln	Pro	His	Ser	Val	Ser	Glu	Ser	Pro	Gly	Lys
1				5					10					15	

Thr	Val	Thr	Ile	Ser	Cys
			20		

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<212> PRT

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<400> 43

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

<210> 44

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<400> 44

Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Ile	Asp	Ser	Ser	Ser	Asn	Ser
1				5				10						15	

Ala	Ser	Leu	Thr	Ile	Ser	Gly	Leu	Lys	Thr	Glu	Asp	Glu	Ala	Asp	Tyr
			20				25						30		

Tyr Cys

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<400> 45

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

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3261-006PC01_SequenceListing_ST25

<213> Artificial Sequence

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<223> antibody fragment

<400> 46

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

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3261-006PC01_SequenceListing_ST25

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Arg Ser
20 25 30

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

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

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

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

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<400> 48

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Gly Tyr

3261-006PC01_SequenceListing_ST25

20 25 30

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

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

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

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

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<400> 49

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

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

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

3261-006PC01_SequenceListing_ST25

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

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

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

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<400> 50

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr

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

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Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser
 115 120

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<400> 52

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Pro Lys
 20 25 30

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

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

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

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser

3261-006PC01_SequenceListing_ST25

115

120

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<400> 53

Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys
 1 5 10 15

Thr Val Thr Ile Ser Cys Thr Arg Ser Ser Gly Ser Ile Asp Ser Asn
 20 25 30

Tyr Val Gln Trp Tyr Gln Gln Arg Pro Gly Ser Ala Pro Thr Thr Val
 35 40 45

Ile Tyr Glu Asp Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
 50 55 60

Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly
 65 70 75 80

Leu Lys Thr Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser
 85 90 95

Asn Asn Arg His Val Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

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3261-006PC01_SequenceListing_ST25

<400> 54

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly
20 25

<210> 55

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Arg Val Thr Met Thr Thr Asp Thr Ser Thr Asn Thr Ala Tyr Met Glu
1 5 10 15

Leu Arg Ser Leu Thr Ala Asp Asp Thr Ala Val Tyr Tyr Cys
20 25 30

<210> 56

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<400> 56

Leu Ser 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> 57

3261-006PC01_SequenceListing_ST25

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<400> 57

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

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 <223> antibody fragment

<400> 58

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> 59
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> antibody fragment

<400> 59

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

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

3261-006PC01_SequenceListing_ST25

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

Gly Trp Ile Ser Ala His Ser Gly His Ala Ser Asn Ala Gln Lys Val
 50 55 60

Glu Asp Arg Val Thr Met Thr Thr Asp Thr Ser Thr Asn Thr Ala Tyr
 65 70 75 80

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

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

Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 60
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> antibody fragment

<400> 60

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

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

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

Gly Trp Ile Ser Ala His Ser Gly His Ala Ser Asn Ala Gln Lys Val

3261-006PC01_SequenceListing_ST25

50

55

60

Glu Asp Arg Val Thr Met Thr Thr Asp Thr Ser Thr Asn Thr Ala Tyr
65 70 75 80

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

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

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 61
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> antibody fragment

<400> 61

Leu Ser 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 Gly Ser Lys Gly Val
20 25 30

His Trp Tyr Gln Gln Lys Pro 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

3261-006PC01_SequenceListing_ST25

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> 62
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> antibody fragment

<400> 62

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Arg Ser
20 25 30

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

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

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

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser

3261-006PC01_SequenceListing_ST25

115

120

<210> 63
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> antibody fragment

<400> 63

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

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

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

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

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

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 64
 <211> 120
 <212> PRT

3261-006PC01_SequenceListing_ST25

<213> Artificial Sequence

<220>

<223> antibody fragment

<400> 64

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

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

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

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

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

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 65

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> antibody fragment

<400> 65

3261-006PC01_SequenceListing_ST25

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

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

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

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

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

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 66
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> antibody fragment

<400> 66

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Gly Thr Tyr

3261-006PC01_SequenceListing_ST25

20 25 30

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

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

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

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 67
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> antibody fragment

<400> 67

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Pro Lys
20 25 30

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

3261-006PC01_SequenceListing_ST25

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

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

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 68
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> antibody fragment

<400> 68

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

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

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

Gly Trp Ile Ser Ala His Ser Gly His Ala Ser Asn Ala Gln Lys Val
50 55 60

Glu Asp Arg Val Thr Met Thr Thr Asp Thr Ser Thr Asn Thr Ala Tyr

3261-006PC01_SequenceListing_ST25

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

<210> 69
 <211> 360
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> antibody fragment

<400> 69
 gaggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
 tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
 cctggacaag ggcttgagtg gatgggaggg atcatcccta tctttgttac agcaaactac 180
 gcacagaagt tccagggcag agtcacgatt accgcggaca agtccacgag cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggcgggtgt actactgcgc tagaggcaga 300
 cagatgttcg gtgcaggcat cgatttctgg ggccagggca ccctgggtcac cgtctcctca 360

<210> 70
 <211> 360
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> antibody fragment

<400> 70
 caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60

3261-006PC01_SequenceListing_ST25

tcctgcaagg cttctggagg caccttcagc cgttcggcta tcagctgggt gcgacaggcc	120
cctggacaag ggcttgagtg gatgggagtt atcatccctg cgtttggtga ggcaaaactac	180
gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac	240
atggagctga gcagcctgag atctgaggac acggcgggtgt actactgcgc tagaggcaga	300
cagatgttcg gtgcaggcat cgatttctgg ggccagggca ccctgggtcac cgtctcctca	360

<210> 71
 <211> 360
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> antibody fragment

<400> 71	
caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggta	60
tcatgcaagg cttctggagg caccttcagc gggtatgcta tctcttgggt gcgacaggcc	120
cctggacaag ggcttgagtg gatgggagtt atcatccctg cttttggtac agcaaaactac	180
gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac	240
atggagctga gcagcctgag atctgaggac acggcgggtgt actactgcgc cagaggcaga	300
cagatgttcg gtgcaggcat cgatttctgg ggccagggca ccctgggtcac cgtctcctca	360

<210> 72
 <211> 360
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> antibody fragment

<400> 72	
caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc	60
tcctgcaagg cttctggagg caccttctgg aggtatgcta tcagctgggt gcgacaggcc	120
cctggacaag ggcttgagtg gatgggagtt atcatcccta tctggggtaa agcaaaactac	180

3261-006PC01_SequenceListing_ST25

gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac	240
atggagctga gcagcctgag atctgaggac acggcgggtgt actactgcgc cagaggcaga	300
cagatgttcg gtgcaggcat cgatttctgg ggccagggca ccctgggtcac cgtctcctca	360

<210> 73
 <211> 360
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> antibody fragment

<400> 73	
caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc	60
tcctgcaagg cttctggagg caccttcggg agctatgcta tctcttgggt gcgacaggcc	120
cctggacaag ggcttgagt gatgggaggg atctatcctg cttttggtac agcaaactac	180
gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac	240
atggagctga gcagcctgag atctgaggac acggcgggtgt actactgcgc tagaggcaga	300
cagatgttcg gtgcaggcat cgatttctgg ggccagggca ccctgggtcac cgtctcctca	360

<210> 74
 <211> 360
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> antibody fragment

<400> 74	
caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc	60
tcctgcaagg cttctggagg caccttcggg acgtatgcta tcagctgggt gcgacaggcc	120
cctggacaag ggcttgagt gatgggaggg atctatccta ggtttgggtac agcaaactac	180
gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac	240
atggagctga gcagcctgag atctgaggac acggcgggtgt actactgcgc tagaggcaga	300

3261-006PC01_SequenceListing_ST25

cagatgttcg gtgcaggcat cgatttctgg ggccagggca ccctgggtcac cgtctcctca 360

<210> 75

<211> 360

<212> DNA

<213> Artificial Sequence

<220>

<223> antibody fragment

<400> 75

cagggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60

tcctgcaagg cttctggagg caccttcagc ccgaaggcta tcagctgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagtg atcatcccta tctttggtcc ggcaaactac 180

gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac 240

atggagctga gcagcctgag atctgaggac acggcgggtgt actactgcgc tagaggcaga 300

cagatgttcg gtgcaggcat cgatttctgg ggccagggca ccctgggtcac cgtctcctca 360

<210> 76

<211> 360

<212> DNA

<213> Artificial Sequence

<220>

<223> antibody fragment

<400> 76

gaggttcagc tgggtgcagtc tggaggtgag gtgaagaagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctgggta cacccttagc agccatggta tcacctgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggatgg atcagcgctc acagtgggtca cgcaagcaat 180

gcacagaagg tcgaggacag agtcaccatg accacagaca catccacgaa cacagcctac 240

atggagctga ggagcctgac agctgacgac acggcgggtgt actactgcgc cagagtccat 300

gccgccttgt actacgggtat ggacgtctgg gggcaaggga ccctgggtcac cgtctcctca 360

<210> 77

3261-006PC01_SequenceListing_ST25

<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<223> antibody fragment

<400> 77
gaggttcagc tgggtgcagtc tggaggtgag gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaagg cttctgggta cacccttagc agccatggta tcacctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg atcagcgctc acagtgggtca cgcaagcaat 180
gcacagaagg tcgaggacag agtcaccatg accacagaca catccacgaa cacagcctac 240
atggagctga ggagcctgac agctgacgac acggcggtgt actactgcgc cagagtccat 300
gccgccttgt accacggtat ggacgtctgg gggcaaggga ccctgggtcac cgtctcctca 360

<210> 78
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<223> antibody fragment

<400> 78
gaggttcagc tgggtgcagtc tggaggtgag gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaagg cttctgggta cacccttagc agccatggta tcacctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg atcagcgctc acagtgggtca cgcaagcaat 180
gcacagaagg tcgaggacag agtcaccatg accacagaca catccacgaa cacagcctac 240
atggagctga ggagcctgac agctgacgac acggcggtgt actactgcgc cagagtgtgg 300
agggccttgt accacggtat ggacgtctgg gggcaaggga ccctgggtcac cgtctcctca 360

<210> 79
<211> 336
<212> DNA
<213> Artificial Sequence

3261-006PC01_SequenceListing_ST25

<220>

<223> antibody fragment

<400> 79

aattttatgc tgactcagcc ccactctgtg tcggagtctc cggggaagac ggtaaccatc	60
tcctgcaccc gcagcagtgg cagcattgac agcaactatg tgcagtggta ccagcagcgc	120
ccgggcagtg cccccaccac tgtgatctat gaggataacc aaagaccctc tggggtcctt	180
gatcggttct ctggctccat cgacagctcc tccaactctg cctccctcac catctctgga	240
ctgaagactg aggacgaggc tgactactac tgtcagtctt atgatagcaa caataggcat	300
gtgatattcg gcggaggac caagctgacc gtccta	336

<210> 80

<211> 324

<212> DNA

<213> Artificial Sequence

<220>

<223> antibody fragment

<400> 80

ttgtctgtgc tgactcagcc accctcagtg tcagtggccc caggacagac ggccaggatt	60
acctgtgggg gaaacaacat tggaagtaaa ggtgtgcact ggtaccagca gaagccaggc	120
caggccccctg tgctggtcgt ctatgatgat agcgaccggc cctcagggat ccctgagcga	180
ttctctggct ccaactctgg gaacacggcc accctgacca tcagcagggt cgaagccggg	240
gatgaggccg actattactg tcagggtgtgg gacagtagta gtgatcattg ggtgttcggc	300
ggagggacca agctgaccgt ccta	324

<210> 81

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> antibody fragment

<400> 81

3261-006PC01_SequenceListing_ST25

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 82
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> antibody fragment

<400> 82

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Leu Ser Ser His

3261-006PC01_SequenceListing_ST25

20 25 30

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

Gly Trp Ile Ser Ala His Ser Gly His Ala Ser Asn Ala Gln Lys Val
50 55 60

Glu Asp Arg Val Thr Met Thr Thr Asp Thr Ser Thr Asn Thr Ala Tyr
65 70 75 80

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

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

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 83
<211> 451
<212> PRT
<213> Artificial Sequence

<220>
<223> antibody fragment

<400> 83

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

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Arg Tyr
20 25 30

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

3261-006PC01_SequenceListing_ST25

Ala Asn Ile Lys 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 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 Gly Gly Trp Phe Gly Glu Leu Ala Phe Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

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

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

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

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

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

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

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

3261-006PC01_SequenceListing_ST25

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

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

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

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
290 295 300

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

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

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

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

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

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

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

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

3261-006PC01_SequenceListing_ST25

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

Pro Gly Lys
 450

<210> 84
 <211> 215
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> antibody fragment

<400> 84

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Val Ser Ser Ser
 20 25 30

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

Ile Tyr Asp Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
 50 55 60

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

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

Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala
 100 105 110

Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser

3261-006PC01_SequenceListing_ST25

115

120

125

Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu
130 135 140

Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser
145 150 155 160

Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu
165 170 175

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

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

Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 85
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> antibody fragment

<400> 85

Gln Ser Tyr Asp Ser Asn Leu Arg His Val Ile
1 5 10

<210> 86
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> antibody fragment

3261-006PC01_SequenceListing_ST25

<400> 86

Gln Ser Tyr Asp Ser Asn Ile Arg His Val Ile
1 5 10

<210> 87

<211> 34

<212> PRT

<213> Homo sapiens

<400> 87

Gly Val Pro Asp Arg Phe Ser Gly Ser Ile Asp Ser Ser Ser Asn Trp
1 5 10 15

Ala Ser Leu Thr Ile Ser Gly Leu Lys Thr Glu Asp Glu Ala Asp Tyr
20 25 30

Tyr Cys

<210> 88

<211> 34

<212> PRT

<213> Homo sapiens

<400> 88

Gly Val Pro Asp Arg Phe Ser Gly Ser Ile Asp Ser Ser Ser Asn Val
1 5 10 15

Ala Ser Leu Thr Ile Ser Gly Leu Lys Thr Glu Asp Glu Ala Asp Tyr
20 25 30

Tyr Cys