

SEQUENCE LISTING

<110> Boehringer Ingelheim International GmbH

<120> POLYPEPTIDES ANTAGONIZING WNT SIGNALING IN TUMOR CELLS

<130> 12-0422-WO-1

<160> 38

<170> BiSSAP 1.3.6

<210> 1

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR1 of F0129097A08

<400> 1

Thr Tyr Val Met Gly

1 5

<210> 2

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR2 of F0129097A08

<400> 2

Ala Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys

1 5 10 15

Gly

<210> 3

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR3 of F0129097A08

<400> 3

Ser Arg Gly Thr Ser Thr Pro Ser Arg Ala Ser Gly Val Ser Arg Tyr

1 5 10 15

Asp Tyr

<210> 4

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR1 of F0129093A02

<400> 4

Arg Tyr Ala Val Ala

1 5

<210> 5

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR2 of F0129093A02

<400> 5

Ala Ile Thr Trp Ser Ser Gly Arg Ile Asp Tyr Ala Asp Ser Val Lys

1 5 10 15

Gly

<210> 6

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR3 of F0129093A02

<400> 6

Asp Arg Arg Pro Arg Ser Thr Gly Arg Ser Gly Thr Gly Ser Pro Ser

1 5 10 15

Thr Tyr Asp Tyr

20

<210> 7

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR1 of F0129046C10(E1A,N32G)

<400> 7

Ile Gly Ala Met Gly

1 5

<210> 8

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR2 of F0129046C10(E1A,N32G)

<400> 8

Ala Val Ser Ser Gly Gly Ser Thr Tyr Tyr Val Asp Ser Val Lys Gly

1 5 10 15

<210> 9

<211> 12

<212> PRT
<213> Artificial Sequence

<220>
<223> CDR3 of F0129046C10(E1A,N32G)

<400> 9
Glu Thr Gly Pro Tyr Gly Pro Pro Lys Arg Asp Tyr
1 5 10

<210> 10
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR1 of F0129046C10

<400> 10
Ile Asn Ala Met Gly
1 5

<210> 11
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> F0129097A08 (E1A, V23A) ISVD full sequence

<400> 11
Ala 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 Arg Thr Phe Ser Thr Tyr
20 25 30
Val Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45
Ala Ala Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Ala Ser Arg Gly Thr Ser Thr Pro Ser Arg Ala Ser Gly Val Ser
100 105 110
Arg Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 12
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> F0129093A02 ISVD full sequence

<400> 12
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 Leu Thr Phe Ser Arg Tyr

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

<210> 13
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> F0129046C10(E1A,N32G) ISVD full sequence

<400> 13																
Ala	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	Ser	Ile	Phe	Arg	Ile	Gly	
			20					25				30				
Ala	Met	Gly	Trp	Tyr	Arg	Gln	Ala	Pro	Gly	Lys	Gln	Arg	Glu	Leu	Val	
		35					40					45				
Ala	Ala	Val	Ser	Ser	Gly	Gly	Ser	Thr	Tyr	Tyr	Val	Asp	Ser	Val	Lys	
	50				55						60					
Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Val	Tyr	Leu	
65					70				75						80	
Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Asn	
			85					90						95		
Arg	Glu	Thr	Gly	Pro	Tyr	Gly	Pro	Pro	Lys	Arg	Asp	Tyr	Trp	Gly	Gln	
		100					105						110			
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser									
		115					120									

<210> 14
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> F0129046C10 ISVD full sequence

<400> 14																
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	Ser	Ile	Phe	Arg	Ile	Asn	
			20					25				30				
Ala	Met	Gly	Trp	Tyr	Arg	Gln	Ala	Pro	Gly	Lys	Gln	Arg	Glu	Leu	Val	
		35					40					45				
Ala	Ala	Val	Ser	Ser	Gly	Gly	Ser	Thr	Tyr	Tyr	Val	Asp	Ser	Val	Lys	
	50				55						60					
Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Val	Tyr	Leu	
65					70				75						80	
Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Asn	

				85						90						95			
Arg	Glu	Thr	Gly	Pro	Tyr	Gly	Pro	Pro	Lys	Arg	Asp	Tyr	Trp	Gly	Gln				
			100					105					110						
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser												
		115					120												

<210> 15
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ALB11 CDR1

<400> 15
 Ser Phe Gly Met Ser
 1 5

<210> 16
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ALB11 CDR2

<400> 16
 Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val Lys
 1 5 10 15
 Gly

<210> 17
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ALB11 CDR3

<400> 17
 Gly Gly Ser Leu Ser Arg
 1 5

<210> 18
 <211> 432
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> F012900082 full sequence

<400> 18
 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 Val Ala Ser Gly Arg Thr Phe Ser Thr Tyr
 20 25 30
 Val Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Ala Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val

50		55		60												
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Val	Tyr	
65					70					75					80	
Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
				85					90					95		
Ala	Ala	Ser	Arg	Gly	Thr	Ser	Thr	Pro	Ser	Arg	Ala	Ser	Gly	Val	Ser	
			100					105					110			
Arg	Tyr	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	
		115					120					125				
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	
130					135						140					
Gly	Gly	Ser	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	
145				150					155					160		
Gly	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	
			165					170					175			
Gly	Asn	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	
			180					185					190			
Ser	Phe	Gly	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	
		195					200					205				
Trp	Val	Ser	Ser	Ile	Ser	Gly	Ser	Gly	Ser	Asp	Thr	Leu	Tyr	Ala	Asp	
210					215					220						
Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Thr	Thr	
225				230					235					240		
Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	
			245					250					255			
Tyr	Cys	Thr	Ile	Gly	Gly	Ser	Leu	Ser	Arg	Ser	Ser	Gln	Gly	Thr	Leu	
		260					265					270				
Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	
		275					280					285				
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	
290					295						300					
Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	
305				310					315					320		
Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	
			325					330					335			
Ser	Gly	Ser	Ile	Phe	Arg	Ile	Asn	Ala	Met	Gly	Trp	Tyr	Arg	Gln	Ala	
			340				345						350			
Pro	Gly	Lys	Gln	Arg	Glu	Leu	Val	Ala	Ala	Val	Ser	Ser	Gly	Gly	Ser	
		355				360						365				
Thr	Tyr	Tyr	Val	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	
370					375						380					
Asn	Ser	Lys	Asn	Thr	Val	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	
385				390					395					400		
Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Asn	Arg	Glu	Thr	Gly	Pro	Tyr	Gly	Pro	
			405					410					415			
Pro	Lys	Arg	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	
			420					425					430			

<210> 19
 <211> 435
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> F012900135 full sequence

<400> 19
 Ala 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 Ser Ile Phe Arg Ile Gly
 20 25 30

Ala	Met	Gly	Trp	Tyr	Arg	Gln	Ala	Pro	Gly	Lys	Gln	Arg	Glu	Leu	Val	
	35						40					45				
Ala	Ala	Val	Ser	Ser	Gly	Gly	Ser	Thr	Tyr	Tyr	Val	Asp	Ser	Val	Lys	
	50					55					60					
Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Val	Tyr	Leu	
65					70					75					80	
Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Asn	
			85						90					95		
Arg	Glu	Thr	Gly	Pro	Tyr	Gly	Pro	Pro	Lys	Arg	Asp	Tyr	Trp	Gly	Gln	
			100					105					110			
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	
		115					120						125			
Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	
	130					135					140					
Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Val	Gln	Leu	Val	
145					150					155					160	
Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Asn	Ser	Leu	Arg	Leu	Ser	
				165					170					175		
Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Phe	Gly	Met	Ser	Trp	Val	
			180					185					190			
Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	Ser	Ser	Ile	Ser	Gly	
		195					200					205				
Ser	Gly	Ser	Asp	Thr	Leu	Tyr	Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	
	210				215						220					
Ile	Ser	Arg	Asp	Asn	Ala	Lys	Thr	Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	
225				230						235					240	
Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Thr	Ile	Gly	Gly	Ser	
			245					250					255			
Leu	Ser	Arg	Ser	Ser	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	
			260				265						270			
Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	
		275					280					285				
Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	
	290					295					300					
Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	
305				310						315					320	
Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Leu	Thr	Phe	Ser	Arg	
				325					330					335		
Tyr	Ala	Val	Ala	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Glu	Arg	Glu	Phe	
			340					345					350			
Val	Ala	Ala	Ile	Thr	Trp	Ser	Ser	Gly	Arg	Ile	Asp	Tyr	Ala	Asp	Ser	
		355					360					365				
Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Val	
	370					375					380					
Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	
385				390						395					400	
Cys	Ala	Ala	Asp	Arg	Arg	Pro	Arg	Ser	Thr	Gly	Arg	Ser	Gly	Thr	Gly	
			405					410					415			
Ser	Pro	Ser	Thr	Tyr	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	
			420				425						430			
Ser	Ser	Ala														
		435														

<210> 20
 <211> 433
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> F012900141 full sequence

<400> 20
 Ala 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	Arg	Thr	Phe	Ser	Thr	Tyr		
			20					25					30				
Val	Met	Gly	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Glu	Arg	Glu	Phe	Val		
		35					40					45					
Ala	Ala	Ile	Ser	Trp	Ser	Gly	Gly	Ser	Thr	Tyr	Tyr	Ala	Asp	Ser	Val		
		50				55					60						
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Val	Tyr		
65					70				75						80		
Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys		
			85					90						95			
Ala	Ala	Ser	Arg	Gly	Thr	Ser	Thr	Pro	Ser	Arg	Ala	Ser	Gly	Val	Ser		
			100					105					110				
Arg	Tyr	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly		
		115				120						125					
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly		
		130				135						140					
Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly		
145					150						155				160		
Gly	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro		
				165				170						175			
Gly	Asn	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser		
			180					185					190				
Ser	Phe	Gly	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu		
		195				200						205					
Trp	Val	Ser	Ser	Ile	Ser	Gly	Ser	Gly	Ser	Asp	Thr	Leu	Tyr	Ala	Asp		
		210				215					220						
Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Thr	Thr		
				230						235					240		
Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr		
				245				250						255			
Tyr	Cys	Thr	Ile	Gly	Gly	Ser	Leu	Ser	Arg	Ser	Ser	Gln	Gly	Thr	Leu		
			260					265					270				
Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly		
		275				280						285					
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly		
		290				295						300					
Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly		
305					310					315					320		
Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala		
				325				330					335				
Ser	Gly	Ser	Ile	Phe	Arg	Ile	Gly	Ala	Met	Gly	Trp	Tyr	Arg	Gln	Ala		
			340					345					350				
Pro	Gly	Lys	Gln	Arg	Glu	Leu	Val	Ala	Ala	Val	Ser	Ser	Gly	Gly	Ser		
		355						360					365				
Thr	Tyr	Tyr	Val	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp		
		370				375					380						
Asn	Ser	Lys	Asn	Thr	Val	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu		
				390					395					400			
Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Asn	Arg	Glu	Thr	Gly	Pro	Tyr	Gly	Pro		
				405				410						415			
Pro	Lys	Arg	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser		
			420					425					430				

Ala

<210> 21
 <211> 115
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Alb11 full sequence

<400> 21
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe
 20 25 30
 Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110
 Val Ser Ser
 115

<210> 22
 <211> 121
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> F0129046C10(N32G)

<400> 22
 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 Ser Ile Phe Arg Ile Gly
 20 25 30
 Ala Met Gly Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg Glu Leu Val
 35 40 45
 Ala Ala Val Ser Ser Gly Gly Ser Thr Tyr Tyr Val Asp Ser Val Lys
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr Leu
 65 70 75 80
 Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Asn
 85 90 95
 Arg Glu Thr Gly Pro Tyr Gly Pro Pro Lys Arg Asp Tyr Trp Gly Gln
 100 105 110
 Gly Thr Leu Val Thr Val Ser Ser Ala
 115 120

<210> 23
 <211> 127
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> F0129097A08

<400> 23
 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 Val Ala Ser Gly Arg Thr Phe Ser Thr Tyr
 20 25 30
 Val Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Ala Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Val	Tyr
65					70					75					80
Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85					90						95	
Ala	Ala	Ser	Arg	Gly	Thr	Ser	Thr	Pro	Ser	Arg	Ala	Ser	Gly	Val	Ser
			100					105					110		
Arg	Tyr	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	
		115					120					125			

<210> 24
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> FR1 of F0129097A08 (E1A, V23A)

Ala	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	Arg	Thr	Phe	Ser		
			20					25					30		

<210> 25
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> FR2 of F0129097A08

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

<210> 26
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> FR3 of F0129097A08

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

<210> 27
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> FR4 of F0129097A08

<400> 27

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

<210> 28
<211> 30
<212> PRT
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<220>
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<400> 28
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 Leu Thr Phe Ser
20 25 30

<210> 29
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> FR4 of F0129093A02

<400> 29
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala
1 5 10

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

<220>
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<400> 30
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 Val Ala Ser Gly Arg Thr Phe Ser
20 25 30

<210> 31
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<212> PRT
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<220>
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<400> 31
Ala 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 Ser Ile Phe Arg
20 25 30

<210> 32
<211> 14
<212> PRT

<213> Artificial Sequence

<220>

<223> FR2 of F0129046C10

<400> 32

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

<210> 33

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> FR3 of F0129046C10

<400> 33

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

<210> 34

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> FR1 of F0129046C10

<400> 34

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	Ser	Ile	Phe	Arg		
			20					25					30		

<210> 35

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> FR1 of ALB11

<400> 35

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

<210> 36

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> FR2 of ALB11

<400> 36

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

<210> 37

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> FR3 of ALB11

<400> 37

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

<210> 38

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> FR4 of ALB11

<400> 38

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