

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

```
<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	
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	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	
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			

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
<213> Artificial Sequence

<220>
<223> FR1 of F0129093A02

<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>
<223> FR1 of F0129097A08

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

<220>
<223> FR1 of F0129046C10 (E1A, N32G)

<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	