

SEQUENCE LISTING

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<130> AA3200 PCT BS

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<141> 2018-01-05

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<151> 2018-01-05

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<170> BiSSAP 1.3.6

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<212> PRT

<213> Homo sapiens

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<223> Q13148 TADBP_HUMAN TAR DNA-binding protein 43 aa 1-414

<400> 1

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

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Glu	Phe	Phe	Ser	Gln	Tyr	Gly	Asp	Val	Met	Asp	Val	Phe	Ile	Pro	Lys
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225					230					235					240
Gln	Ser	Leu	Cys	Gly	Glu	Asp	Leu	Ile	Ile	Lys	Gly	Ile	Ser	Val	His
				245					250					255	
Ile	Ser	Asn	Ala	Glu	Pro	Lys	His	Asn	Ser	Asn	Arg	Gln	Leu	Glu	Arg
			260					265					270		
Ser	Gly	Arg	Phe	Gly	Gly	Asn	Pro	Gly	Gly	Phe	Gly	Asn	Gln	Gly	Gly
		275					280					285			
Phe	Gly	Asn	Ser	Arg	Gly	Gly	Gly	Ala	Gly	Leu	Gly	Asn	Asn	Gln	Gly
290						295					300				
Ser	Asn	Met	Gly	Gly	Gly	Met	Asn	Phe	Gly	Ala	Phe	Ser	Ile	Asn	Pro
305					310					315					320
Ala	Met	Met	Ala	Ala	Ala	Gln	Ala	Ala	Leu	Gln	Ser	Ser	Trp	Gly	Met
			325						330					335	
Met	Gly	Met	Leu	Ala	Ser	Gln	Gln	Asn	Gln	Ser	Gly	Pro	Ser	Gly	Asn
			340					345					350		
Asn	Gln	Asn	Gln	Gly	Asn	Met	Gln	Arg	Glu	Pro	Asn	Gln	Ala	Phe	Gly
		355					360					365			
Ser	Gly	Asn	Asn	Ser	Tyr	Ser	Gly	Ser	Asn	Ser	Gly	Ala	Ala	Ile	Gly
	370					375					380				
Trp	Gly	Ser	Ala	Ser	Asn	Ala	Gly	Ser	Gly	Ser	Gly	Phe	Asn	Gly	Gly
385					390					395					400
Phe	Gly	Ser	Ser	Met	Asp	Ser	Lys	Ser	Ser	Gly	Trp	Gly	Met		
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<220>
 <223> Peptide TDP-1 aa 212-272 (61aa)

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Ala	Phe	Ala	Phe	Val	Thr	Phe	Ala	Asp	Asp	Gln	Ile	Ala	Gln	Ser	Leu
		20					25					30			
Cys	Gly	Glu	Asp	Leu	Ile	Ile	Lys	Gly	Ile	Ser	Val	His	Ile	Ser	Asn
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<220>
 <223> Peptide TDP-3 aa 310-370 (62aa)

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 Cys Gly Met Asn Phe Gly Ala Phe Ser Ile Asn Pro Ala Met Met Ala
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 Ala Ala Gln Ala Ala Leu Gln Ser Ser Trp Gly Met Met Gly Met Leu
 20 25 30
 Ala Ser Gln Gln Asn Gln Ser Gly Pro Ser Gly Asn Asn Gln Asn Gln
 35 40 45
 Gly Asn Met Gln Arg Glu Pro Asn Gln Ala Phe Gly Ser Gly
 50 55 60

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<220>
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 1 5 10 15
 Lys Pro Phe Arg Ala Phe Ala Phe
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 <213> Homo sapiens

<220>
 <223> Epitope

<400> 5
 Gly Asp Val Met Asp Val Phe Ile
 1 5

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<220>
 <223> Q13148 TADBP_HUMAN TAR DNA-binding protein 43 aa 1-414

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 Met Ser Glu Tyr Ile Arg Val Thr Glu Pro Ser Glu Asp Asp Gly Thr
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 Val Leu Leu Ser Thr Val Thr Ala Thr Val Leu Leu Ser Thr Val Thr
 20 25 30
 Ala Gln Phe Pro Gly Ala Cys Gly Leu Arg Tyr Arg Asn Pro Val Ser

<220>

<223> Q13148 TADBP_HUMAN TAR DNA-binding protein 43 aa 1-414

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Val	Leu	Leu	Ser	Thr	Val	Thr	Ala	Thr	Val	Leu	Leu	Ser	Thr	Val	Thr
			20					25					30		
Ala	Gln	Phe	Pro	Gly	Ala	Cys	Gly	Leu	Arg	Tyr	Arg	Asn	Pro	Val	Ser
		35					40					45			
Gln	Cys	Met	Arg	Gly	Val	Arg	Leu	Val	Glu	Gly	Ile	Leu	His	Ala	Pro
	50					55					60				
Asp	Ala	Gly	Trp	Gly	Asn	Leu	Val	Tyr	Val	Val	Asn	Tyr	Pro	Lys	Asp
65					70				75						80
Asn	Lys	Arg	Lys	Met	Asp	Glu	Thr	Asp	Ala	Ser	Ser	Ala	Val	Lys	Val
				85					90					95	
Lys	Arg	Ala	Val	Gln	Lys	Thr	Ser	Asp	Leu	Ile	Val	Leu	Gly	Leu	Pro
			100					105					110		
Trp	Lys	Thr	Thr	Glu	Gln	Asp	Leu	Lys	Glu	Tyr	Phe	Ser	Thr	Phe	Gly
		115					120					125			
Glu	Val	Leu	Met	Val	Gln	Val	Lys	Lys	Asp	Leu	Lys	Thr	Gly	His	Ser
	130					135					140				
Lys	Gly	Phe	Gly	Phe	Val	Arg	Phe	Thr	Glu	Tyr	Glu	Thr	Gln	Val	Lys
145					150				155						160
Val	Met	Ser	Gln	Arg	His	Met	Ile	Asp	Gly	Arg	Trp	Cys	Asp	Cys	Lys
				165					170					175	
Leu	Pro	Asn	Ser	Lys	Gln	Ser	Gln	Asp	Glu	Pro	Leu	Arg	Ser	Arg	Lys
			180					185					190		
Val	Phe	Val	Gly	Arg	Cys	Thr	Glu	Asp	Met	Thr	Glu	Asp	Glu	Leu	Arg
		195					200					205			
Glu	Phe	Phe	Ser	Gln	Tyr	Gly	Asp	Val	Met	Asp	Val	Phe	Ile	Pro	Lys
	210					215				220					
Pro	Phe	Arg	Ala	Phe	Ala	Phe	Val	Thr	Phe	Ala	Asp	Asp	Gln	Ile	Ala
225					230					235					240
Gln	Ser	Leu	Cys	Gly	Glu	Asp	Leu	Ile	Ile	Lys	Gly	Ile	Ser	Val	His
				245					250					255	
Ile	Ser	Asn	Ala	Glu	Pro	Lys	His	Asn	Ser	Asn	Arg	Gln	Leu	Glu	Arg
		260						265					270		
Ser	Gly	Arg	Phe	Gly	Gly	Asn	Pro	Gly	Gly	Phe	Gly	Asn	Gln	Gly	Gly
		275				280						285			
Phe	Gly	Asn	Ser	Arg	Gly	Gly	Gly	Ala	Gly	Leu	Gly	Asn	Asn	Gln	Gly
	290					295					300				
Ser	Asn	Met	Gly	Gly	Gly	Met	Asn	Phe	Gly	Ala	Phe	Ser	Ile	Asn	Pro
305					310					315					320
Ala	Met	Met	Ala	Ala	Ala	Gln	Ala	Ala	Leu	Gln	Ser	Ser	Trp	Gly	Met
				325					330					335	
Met	Gly	Met	Leu	Ala	Ser	Gln	Gln	Asn	Gln	Ser	Gly	Pro	Ser	Gly	Asn
			340					345					350		
Asn	Gln	Asn	Gln	Gly	Asn	Met	Gln	Arg	Glu	Pro	Asn	Gln	Ala	Phe	Gly
		355					360					365			
Ser	Gly	Asn	Asn	Ser	Tyr	Ser	Gly	Ser	Asn	Ser	Gly	Ala	Ala	Ile	Gly
	370					375					380				
Trp	Gly	Ser	Ala	Ser	Asn	Ala	Gly	Ser	Gly	Ser	Gly	Phe	Asn	Gly	Gly
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Phe Gly Ser Ser Met Asp Ser Lys Ser Ser Gly Trp Gly Met
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<210> 8
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<220>
<223> Q13148 TADBP_HUMAN TAR DNA-binding protein 43 aa 1-414

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20 25 30
Ala Gln Phe Pro Gly Ala Cys Gly Leu Arg Tyr Arg Asn Pro Val Ser
35 40 45
Gln Cys Met Arg Gly Val Arg Leu Val Glu Gly Ile Leu His Ala Pro
50 55 60
Asp Ala Gly Trp Gly Asn Leu Val Tyr Val Val Asn Tyr Pro Lys Asp
65 70 75 80
Asn Lys Arg Lys Met Asp Glu Thr Asp Ala Ser Ser Ala Val Lys Val
85 90 95
Lys Arg Ala Val Gln Lys Thr Ser Asp Leu Ile Val Leu Gly Leu Pro
100 105 110
Trp Lys Thr Thr Glu Gln Asp Leu Lys Glu Tyr Phe Ser Thr Phe Gly
115 120 125
Glu Val Leu Met Val Gln Val Lys Lys Asp Leu Lys Thr Gly His Ser
130 135 140
Lys Gly Phe Gly Phe Val Arg Phe Thr Glu Tyr Glu Thr Gln Val Lys
145 150 155 160
Val Met Ser Gln Arg His Met Ile Asp Gly Arg Trp Cys Asp Cys Lys
165 170 175
Leu Pro Asn Ser Lys Gln Ser Gln Asp Glu Pro Leu Arg Ser Arg Lys
180 185 190
Val Phe Val Gly Arg Cys Thr Glu Asp Met Thr Glu Asp Glu Leu Arg
195 200 205
Glu Phe Phe Ser Gln Tyr Gly Asp Val Met Asp Val Phe Ile Pro Lys
210 215 220
Pro Phe Arg Ala Phe Ala Phe Val Thr Phe Ala Asp Asp Gln Ile Ala
225 230 235 240
Gln Ser Leu Cys Gly Glu Asp Leu Ile Ile Lys Gly Ile Ser Val His
245 250 255
Ile Ser Asn Ala Glu Pro Lys His Asn Ser Asn Arg Gln Leu Glu Arg
260 265 270
Ser Gly Arg Phe Gly Gly Asn Pro Gly Gly Phe Gly Asn Gln Gly Gly
275 280 285
Phe Gly Asn Ser Arg Gly Gly Gly Ala Gly Leu Gly Asn Asn Gln Gly
290 295 300
Ser Asn Met Gly Gly Gly Met Asn Phe Gly Ala Phe Ser Ile Asn Pro
305 310 315 320
Ala Met Met Ala Ala Ala Gln Ala Ala Leu Gln Ser Ser Trp Gly Met

				325					330					335		
Met	Gly	Met	Leu	Ala	Ser	Gln	Gln	Asn	Gln	Ser	Gly	Pro	Ser	Gly	Asn	
			340					345					350			
Asn	Gln	Asn	Gln	Gly	Asn	Met	Gln	Arg	Glu	Pro	Asn	Gln	Ala	Phe	Gly	
		355					360					365				
Ser	Gly	Asn	Asn	Ser	Tyr	Ser	Gly	Ser	Asn	Ser	Gly	Ala	Ala	Ile	Gly	
	370					375					380					
Trp	Gly	Ser	Ala	Ser	Asn	Ala	Gly	Ser	Gly	Ser	Gly	Phe	Asn	Gly	Gly	
385					390					395					400	
Phe	Gly	Ser	Ser	Met	Asp	Ser	Lys	Ser	Ser	Gly	Trp	Gly	Met			
				405					410							

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Val	Leu	Leu	Ser	Thr	Val	Thr	Ala	Thr	Val	Leu	Leu	Ser	Thr	Val	Thr	
			20				25						30			
Ala	Gln	Phe	Pro	Gly	Ala	Cys	Gly	Leu	Arg	Tyr	Arg	Asn	Pro	Val	Ser	
		35				40					45					
Gln	Cys	Met	Arg	Gly	Val	Arg	Leu	Val	Glu	Gly	Ile	Leu	His	Ala	Pro	
	50				55					60						
Asp	Ala	Gly	Trp	Gly	Asn	Leu	Val	Tyr	Val	Val	Asn	Tyr	Pro	Lys	Asp	
65					70				75					80		
Asn	Lys	Arg	Lys	Met	Asp	Glu	Thr	Asp	Ala	Ser	Ser	Ala	Val	Lys	Val	
			85					90						95		
Lys	Arg	Ala	Val	Gln	Lys	Thr	Ser	Asp	Leu	Ile	Val	Leu	Gly	Leu	Pro	
		100					105						110			
Trp	Lys	Thr	Glu	Gln	Asp	Leu	Lys	Glu	Tyr	Phe	Ser	Thr	Phe	Gly		
	115				120					125						
Glu	Val	Leu	Met	Val	Gln	Val	Lys	Lys	Asp	Leu	Lys	Thr	Gly	His	Ser	
	130				135				140							
Lys	Gly	Phe	Gly	Phe	Val	Arg	Phe	Thr	Glu	Tyr	Glu	Thr	Gln	Val	Lys	
145					150				155					160		
Val	Met	Ser	Gln	Arg	His	Met	Ile	Asp	Gly	Arg	Trp	Cys	Asp	Cys	Lys	
			165					170						175		
Leu	Pro	Asn	Ser	Lys	Gln	Ser	Gln	Asp	Glu	Pro	Leu	Arg	Ser	Arg	Lys	
		180					185						190			
Val	Phe	Val	Gly	Arg	Cys	Thr	Glu	Asp	Met	Thr	Glu	Asp	Glu	Leu	Arg	
	195					200					205					
Glu	Phe	Phe	Ser	Gln	Tyr	Gly	Asp	Val	Met	Asp	Val	Phe	Ile	Pro	Lys	
	210					215				220						
Pro	Phe	Arg	Ala	Phe	Ala	Phe	Val	Thr	Phe	Ala	Asp	Asp	Gln	Ile	Ala	
225					230					235				240		
Gln	Ser	Leu	Cys	Gly	Glu	Asp	Leu	Ile	Ile	Lys	Gly	Ile	Ser	Val	His	
				245				250						255		

Ile	Ser	Asn	Ala	Glu	Pro	Lys	His	Asn	Ser	Asn	Arg	Gln	Leu	Glu	Arg
			260					265					270		
Ser	Gly	Arg	Phe	Gly	Gly	Asn	Pro	Gly	Gly	Phe	Gly	Asn	Gln	Gly	Gly
		275					280					285			
Phe	Gly	Asn	Ser	Arg	Gly	Gly	Gly	Ala	Gly	Leu	Gly	Asn	Asn	Gln	Gly
	290					295					300				
Ser	Asn	Met	Gly	Gly	Gly	Met	Asn	Phe	Gly	Ala	Phe	Ser	Ile	Asn	Pro
305					310					315					320
Ala	Met	Met	Ala	Ala	Ala	Gln	Ala	Ala	Leu	Gln	Ser	Ser	Trp	Gly	Met
			325						330					335	
Met	Gly	Met	Leu	Ala	Ser	Gln	Gln	Asn	Gln	Ser	Gly	Pro	Ser	Gly	Asn
			340					345					350		
Asn	Gln	Asn	Gln	Gly	Asn	Met	Gln	Arg	Glu	Pro	Asn	Gln	Ala	Phe	Gly
		355					360					365			
Ser	Gly	Asn	Asn	Ser	Tyr	Ser	Gly	Ser	Asn	Ser	Gly	Ala	Ala	Ile	Gly
	370					375					380				
Trp	Gly	Ser	Ala	Ser	Asn	Ala	Gly	Ser	Gly	Ser	Gly	Phe	Asn	Gly	Gly
385					390					395					400
Phe	Gly	Ser	Ser	Met	Asp	Ser	Lys	Ser	Ser	Gly	Trp	Gly	Met		
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<212> PRT

<213> Artificial Sequence

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<223> ACI-7062-401A2-Ab2-VL Peptidic sequence of the light chain variable domain

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

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<212> PRT

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<223> ACI-7062-401A2-Ab2-VL FR1

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1				5				10					15		
Gln	Lys	Val	Thr	Met	Ser	Cys									
			20												

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<223> ACI-7062-401A2-Ab2-VL CDR1

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

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<223> ACI-7062-401A2-Ab2-VL FR2

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

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1				5											

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<223> ACI-7062-401A2-Ab2-VL FR3

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

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<400> 16

Gln	Gln	His	Tyr	Ser	Ile	Pro	Leu	Thr
1				5				

<210> 17

<211> 12

<212> PRT

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<220>

<223> ACI-7062-401A2-Ab2-VL FR4

<400> 17

Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys	Arg	Ala
1				5				10			

<210> 18

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-401A2-Ab2-VL Tail

<400> 18

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

<210> 19

<211> 378
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-401A2-Ab2-VL Nucleotidic sequence of the light chain variable domain

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atgagctgca agtccagtc gagcctttta aatagtggcg atcaaaagaa ctatttggcc 120
tggtaccagc agaaaccagg acagtctcct gaacttctgt tatactttgc atccactagg 180
gcatctgggg tccctgatcg cttcataggc agtggatctg ggacagattt ctctcttacc 240
atcagcagtg tgcaggctga agacctggca gattacttct gtcagcaaca ttatagtatt 300
ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac gggctgatgc tgcaccaact 360
gtatccatct tccctacc 378

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<220>
<223> ACI-7062-401A2-Ab2-VH Peptide sequence of the heavy chain variable domain

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20 25 30
Gly Met His Trp Val Arg Gln Ala Pro Glu Lys Gly Leu Glu Trp Val
35 40 45
Ala Tyr Ile Arg Ser Gly Ser Asp Ile Ile Tyr Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Pro Glu Asn Thr Leu Phe
65 70 75 80
Leu Gln Met Thr Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys
85 90 95
Ala Arg Ser Gly Thr Thr Val Pro Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110
Ser Leu Thr Val Ser Ser Ala Lys Thr Thr Pro Pro Ser Val Tyr Pro
115 120 125
Leu Ala Pro Gly Ser Ala Ala Gln Thr Asn Ser Met Val Thr Leu Gly
130 135 140

Cys Leu Val Lys Gly Tyr Phe Pro
145 150

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<220>
<223> ACI-7062-401A2-Ab2-VH FR1

<400> 21
Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Arg Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
20 25 30

<210> 22
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<220>
<223> ACI-7062-401A2-Ab2-VH CDR1

<400> 22
Arg Phe Gly Met His
1 5

<210> 23
<211> 14
<212> PRT
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<220>
<223> ACI-7062-401A2-Ab2-VH FR2

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

<210> 24
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<220>
<223> ACI-7062-401A2-Ab2-VH CDR2

<400> 24

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

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

<220>
<223> ACI-7062-401A2-Ab2-VH FR3

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

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<220>
<223> ACI-7062-401A2-Ab2-VH CDR3

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Ser Gly Thr Thr Val Pro Phe Asp Tyr
1 5

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

<220>
<223> ACI-7062-401A2-Ab2-VH FR4

<400> 27
Trp Gly Gln Gly Thr Ser Leu Thr Val Ser Ser
1 5 10

<210> 28
<211> 34
<212> PRT
<213> Artificial Sequence

<220>

<223> ACI-7062-401A2-Ab2-VH Tail

<400> 28

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

<210> 29

<211> 456

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-401A2-Ab2-VH Nucleotide sequence of the heavy chain variable domain

<400> 29

gatgtgcagc	tggtggagtc	tgggggaggc	ttagtgcagc	ctggagggtc	ccggagactc	60
tcctgtgcag	cctctggatt	cactttcagt	aggtttggaa	tgactgggt	tcgccaggct	120
ccagagaagg	ggctggagtg	ggtcgcatac	attaggagtg	gcagtgatat	aatctactat	180
gcagactcag	tgaagggccg	attcaccatc	tccagagaca	atcccgagaa	caccctgttc	240
ctgcaaatga	ccagtctaag	gtctgaggac	acggccatgt	attactgtgc	aagatcaggg	300
actacggtcc	cctttgacta	ctggggccaa	ggcaccagtc	tcacagtctc	ttcagccaaa	360
acgacacccc	catctgtcta	tccactggcc	cctggatctg	ctgcccaaac	taactccatg	420
gtgaccctgg	gatgcctgg	caagggctat	ttccct			456

<210> 30

<211> 125

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-412A7-Ab1-VL Peptide sequence of the light chain variable domain

<400> 30

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

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

<210> 31
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412A7-Ab1-VL FR1

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

<210> 32
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412A7-Ab1-VL CDR1

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

<210> 33
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412A7-Ab1-VL FR2

Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ser	Pro	Glu	Leu	Leu	Leu	Tyr	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	--

1 5 10 15

<210> 34
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412A7-Ab1-VL CDR2

<400> 34
Phe Ala Ser Thr Arg Ala Ser
1 5

<210> 35
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412A7-Ab1-VL FR3

<400> 35
Gly Val Pro Asp Arg Phe Ile Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15
Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Asp Tyr Phe Cys
20 25 30

<210> 36
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412A7-Ab1-VL CDR3

<400> 36
Gln Gln His Tyr Ser Ile Pro Leu Thr
1 5

<210> 37
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412A7-Ab1-VL FR4

<400> 37
Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala
1 5 10

<210> 38
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412A7-Ab1-VL Tail

<400> 38
Asp Ala Ala Pro Thr Val Ser Ile Phe Pro
1 5 10

<210> 39
<211> 375
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-412A7-Ab1-VL Nucleotide sequence of the light chain
variable domain

<400> 39
gacattgtga tgacacagtc tccatcctcc ctggctatgt cagttggaca gaaggtcact 60
atgagctgca agtccagtca gaggctttta aatagtggca atcaaaagaa ctatttggcc 120
tggtaccagc agaaaccagg acagtctcct gaacttctat tatactttgc atccactagg 180
gcatctggggg tccctgatcg cttcataggc agtggatctg ggacagattt cactcttacc 240
atcagcagtg tgcaggctga agacctggca gattacttct gtcagcaaca ttatagtatt 300
ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac gggctgatgc tgcaccaact 360
gtatccatct tccca 375

<210> 40
<211> 145
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412A7-Ab1-VH Peptidic sequence of the heavy chain
variable domain

<400> 40

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

<210> 41
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412A7-Ab1-VH FR1

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

<210> 42
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412A7-Ab1-VH CDR1

Ser	Phe	Gly	Met	His
1			5	

<210> 43
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>

<223> ACI-7062-412A7-Ab1-VH FR2

<400> 43

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

<210> 44

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-412A7-Ab1-VH CDR2

<400> 44

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

<210> 45

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-412A7-Ab1-VH FR3

<400> 45

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

<210> 46

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-412A7-Ab1-VH CDR3

<400> 46

Ser	Gly	Thr	Thr	Val	Pro	Phe	Asp	Tyr
1				5				

<210> 47

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

<220>
<223> ACI-7062-412A7-Ab1-VH FR4

<400> 47
Trp Gly Gln Gly Thr Ser Leu Thr Val Ser Ser
1 5 10

<210> 48
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412A7-Ab1-VH Tail

<400> 48
Ala Lys Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Gly Cys Gly
1 5 10 15
Asp Thr Thr Gly Ser Ser Val Thr Leu Gly Cys
20 25

<210> 49
<211> 435
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-412A7-Ab1-VH Nucleotidic sequence of the heavy chain variable domain

<400> 49
gatgtgcagc tgggtggagtc tggggggaggc ttagtgcagc ctggaggggtc ccggagactc 60
tcctgtgcag cctctggatt cactttcagt agctttggaa tgcactgggt tcgtcaggct 120
ccagagaagg ggctggagtg ggtcgcatac attaggagtg gcagtgatat aatctactat 180
gcagactcag tgaagggccg attcaccatc tccagagaca atcccagaaa caccctgttc 240
ctgcaaataa ccagtctaag gtctgaggac acggccatgt attactgtgc aagatcaggg 300
actacgggtc cctttgacta ctggggccaa ggcaccagtc tcacagtctc ttcagccaaa 360
acaacacccc catcagtcta tccactggcc cctgggtgtg gagatacaac tggttcctcc 420
gtgactctgg gatgc 435

<210> 50
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VL Peptidic sequence of the light chain variable domain

<400> 50
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1 5 10 15
Asp Arg Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Arg
20 25 30
Ser Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe 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 Leu Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95
Ser His Val Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg
100 105 110
Ala Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu
115 120 125

<210> 51
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VL FR1

<400> 51
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1 5 10 15
Asp Arg Ala Ser Ile Ser Cys
20

<210> 52
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VL CDR1

<400> 52

Arg Ser Ser Gln Ser Ile Val His Arg Ser Gly Asn Thr Tyr Leu Glu
1 5 10 15

<210> 53

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-406E3-Ab1-VL FR2

<400> 53

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

<210> 54

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-406E3-Ab1-VL CDR2

<400> 54

Lys Val Ser Asn Arg Phe Ser
1 5

<210> 55

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-406E3-Ab1-VL FR3

<400> 55

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 Leu Gly Val Tyr Tyr Cys
20 25 30

<210> 56

<211> 8

<212> PRT

<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VL CDR3

<400> 56
Phe Gln Gly Ser His Val Pro Thr
1 5

<210> 57
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VL FR4

<400> 57
Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala
1 5 10

<210> 58
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VL Tail

<400> 58
Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu
1 5 10

<210> 59
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VL Nucleotidic sequence of the light chain
variable domain

<400> 59
gatgttttga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcgagcctcc 60
atctcttgca gatctagtca gagcattgta catcgtagtg gaaacaccta tttagagtgg 120
tacctgcaga aaccaggcca gtctccaaag ctctgatct acaaagtttc caaccgattt 180
tctgggggtcc cagacagggt cagtggcagt ggatcaggga cagatttcac actcaagatc 240
agcagagtgg aggctgagga tctgggagtt tattactgct ttcaaggttc acatgttccc 300

acgttcggtg ctgggaccaa gctggagctg aaacgggctg atgctgcacc aactgtatcc 360
atcttccac catccagtga g 381

<210> 60
<211> 152
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VH Peptidic sequence of the heavy chain
variable domain

<400> 60
Gln Val Thr Leu Lys Glu Ser Gly Pro Ala Ile Leu Gln Pro Ser Gln
1 5 10 15
Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Thr Thr Tyr
20 25 30
Gly Ile Gly Val Gly Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu
35 40 45
Trp Leu Ala His Ile Trp Trp Asn Asp Asn Lys Tyr Tyr Asn Thr Ala
50 55 60
Leu Lys Ser Arg Leu Thr Val Ser Lys Asp Thr Ser Asn Asn Gln Val
65 70 75 80
Phe Leu Lys Ile Ala Ser Val Asp Thr Ala Asp Thr Ala Thr Tyr Tyr
85 90 95
Cys Ala Arg Val Tyr Gly Asn Leu Tyr Tyr Phe Ala Tyr Trp Gly Gln
100 105 110
Gly Thr Thr Leu Thr Val Ser Ser Ala Lys Thr Thr Ala Pro Ser Val
115 120 125
Tyr Pro Leu Ala Pro Val Cys Gly Asp Thr Thr Gly Ser Ser Val Thr
130 135 140
Leu Gly Cys Leu Val Lys Gly Tyr
145 150

<210> 61
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VH FR1

<400> 61
Gln Val Thr Leu Lys Glu Ser Gly Pro Ala Ile Leu Gln Pro Ser Gln
1 5 10 15
Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Thr
20 25 30

<210> 62
<211> 7

<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VH CDR1

<400> 62
Thr Tyr Gly Ile Gly Val Gly
1 5

<210> 63
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VH FR2

<400> 63
Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu Trp Leu Ala
1 5 10

<210> 64
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VH CDR2

<400> 64
His Ile Trp Trp Asn Asp Asn Lys Tyr Tyr Asn Thr Ala Leu Lys Ser
1 5 10 15

<210> 65
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VH FR3

<400> 65
Arg Leu Thr Val Ser Lys Asp Thr Ser Asn Asn Gln Val Phe Leu Lys
1 5 10 15
Ile Ala Ser Val Asp Thr Ala Asp Thr Ala Thr Tyr Tyr Cys Ala Arg
20 25 30

<210> 66
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VH CDR3

<400> 66
Val Tyr Gly Asn Leu Tyr Tyr Phe Ala Tyr
1 5 10

<210> 67
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VH FR4

<400> 67
Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser
1 5 10

<210> 68
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VH Tail

<400> 68
Ala Lys Thr Thr Ala Pro Ser Val Tyr Pro Leu Ala Pro Val Cys Gly
1 5 10 15
Asp Thr Thr Gly Ser Ser Val Thr Leu Gly Cys Leu Val Lys Gly Tyr
20 25 30

<210> 69
<211> 456
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab1-VH Nucleotidic sequence of the heavy chain
variable domain

<400> 69
caggttactc tgaagagtc tggccctgcg atattgcagc cctcccagac cctcagtcgt 60
acttgttctt tctctgggtt ttcactgacc acttatggta taggagtagg ctggattcgt 120
cagccttcag ggaagggtct ggagtggctg gcacacattt ggtggaatga taataagtac 180
tataacacag ccctgaagag ccggctcact gtctccaagg atacctcaa caaccaggta 240
ttcctcaaga tcgccagtgt agacactgca gatactgcca catactactg tgctcgagtc 300
tatggtaacc tgtactactt tgcctactgg ggccaaggca ccactctcac agtctcctca 360
gccaaaacaa cagcccatc ggtctatcca ctggcccctg tgtgtggaga tacaactggc 420
tcctcggtga ctctaggatg cctgggtcaag ggttat 456

<210> 70
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-404D6-Ab2-VL Peptidic sequence of the light chain variable domain

<400> 70
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1 5 10 15
Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Gly
20 25 30
Ser Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Arg Ile
65 70 75 80
Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95
Ser His Val Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg
100 105 110
Ala Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser
115 120 125

<210> 71
<211> 23
<212> PRT
<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL FR1

<400> 71

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

<210> 72

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL CDR1

<400> 72

Arg	Ser	Ser	Gln	Ser	Ile	Val	His	Gly	Ser	Gly	Asn	Thr	Tyr	Leu	Glu
1			5					10						15	

<210> 73

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL FR2

<400> 73

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

<210> 74

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL CDR2

<400> 74

Lys	Val	Ser	Asn	Arg	Phe	Ser									
1			5												

<210> 75

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL FR3

<400> 75

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

<210> 76

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL CDR3

<400> 76

Phe	Gln	Gly	Ser	His	Val	Pro	Thr
1				5			

<210> 77

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL FR4

<400> 77

Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys	Arg	Ala
1				5				10			

<210> 78

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL Tail

<400> 78

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

<210> 79

<211> 378

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL Nucleotidic sequence of the light chain variable domain

<400> 79

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gatgttttga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcaagcctcc      60
atctcttgca gatctagtca gagcattgta catggttctg gaaacaccta tttagaatgg      120
tacctgcaga aaccaggcca gtctccaaag ctctgatctt acaaagtttc caaccgattt      180
tctgggggtcc cagacagggt cagtggcagt ggatcaggga cagatttcac actcaggatc      240
agcagagtgg aggctgagga tctgggagtt tattactgct ttcaaggttc acatgttccc      300
acgttcggtg ctgggaccaa gctggagctg aaacgggctg atgctgcacc aactgtatcc      360
atcttcccac catccagt                                     378
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<210> 80

<211> 129

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VH Peptide sequence of the heavy chain variable domain

<400> 80

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

<210> 81

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

<220>
<223> ACI-7062-404D6-Ab2-VH FR1

<400> 81
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1 5 10 15
Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser
20 25 30

<210> 82
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-404D6-Ab2-VH CDR1

<400> 82
Thr Tyr Gly Ile Gly Val Gly
1 5

<210> 83
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-404D6-Ab2-VH FR2

<400> 83
Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu Trp Leu Ala
1 5 10

<210> 84
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-404D6-Ab2-VH CDR2

<400> 84
His Ile Trp Trp Asn Asp Tyr Lys Tyr Tyr Asn Thr Ala Leu Lys Ser
1 5 10 15

<210> 85
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-404D6-Ab2-VH FR3

<400> 85
Arg Leu Thr Ile Ser Lys Asp Thr Ser Asn Asn Arg Val Phe Leu Lys
1 5 10 15
Ile Ala Ser Val Asp Thr Ala Asp Thr Ala Thr Tyr Tyr Cys Ala Arg
 20 25 30

<210> 86
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-404D6-Ab2-VH CDR3

<400> 86
Val Tyr Gly Asn Leu Tyr Tyr Phe Asp Tyr
1 5 10

<210> 87
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-404D6-Ab2-VH FR4

<400> 87
Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser
1 5 10

<210> 88
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-404D6-Ab2-VH Tail

<400> 88

Ala Thr Thr Thr Ala Pro Ser Trp Ser
1 5

<210> 89

<211> 387

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VH Nucleotide sequence of the heavy chain
variable domain

<400> 89

caggttactc tgaaagagtc tggccctggg atattgcagc cctcccagac ctcagtcgt 60
acttgttctt tctctggggtt ttcactgagc acttatggta taggagtagg ctggattcgt 120
cagccttcag ggaagggtct ggagtggctg gcacacattt ggtggaatga ttataagtac 180
tataacacag ccctgaagag ccggctcaca atctccaagg atacctcaa caaccgggta 240
ttcctcaaga tcgccagtgt ggacactgca gatactgcca catactactg tgctcgagtc 300
tatggtaacc tgtactactt tgactactgg ggccaaggca ccactctcac agtctcctca 360
gctacaacaa cagcccatc ttggtcc 387

<210> 90

<211> 126

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-410H3-Ab1-VL Peptide sequence of the light chain
variable domain

<400> 90

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

Lys Arg Ala Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Thr
115 120 125

<210> 91
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VL FR1

<400> 91
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ala Met Ser Val Gly
1 5 10 15
Gln Lys Val Thr Met Ser Cys
20

<210> 92
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VL CDR1

<400> 92
Lys Ser Ser Gln Ser Leu Leu Asn Ser Gly Asn Gln Lys Asn Tyr Leu
1 5 10 15
Ala

<210> 93
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VL FR2

<400> 93
Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Glu Leu Leu Leu Tyr
1 5 10 15

<210> 94
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VL CDR2

<400> 94
Phe Ala Ser Thr Arg Ala Ser
1 5

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

<220>
<223> ACI-7062-410H3-Ab1-VL FR3

<400> 95
Gly Val Pro Asp Arg Phe Ile Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15
Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Asp Tyr Phe Cys
20 25 30

<210> 96
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VL CDR3

<400> 96
Gln Gln His Tyr Ser Ile Pro Leu Thr
1 5

<210> 97
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VL FR4

<400> 97
Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala
1 5 10

<210> 98
<211> 11
<212> PRT
<213> Artificial Sequence

<220>

<223> ACI-7062-410H3-Ab1-VL Tail

<400> 98

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

<210> 99

<211> 378

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-410H3-Ab1-VL Nucleotide sequence of the light chain
variable domain

<400> 99

gacattgtga tgacacagtc tccatcctcc ctggctatgt cagttggaca gaaggtcact 60
atgagctgca agtccagtca gagcctttta aatagtggca atcaaaagaa ctatttggcc 120
tggtaccagc agaaaccagg acagtctcct gaacttctgt tatactttgc atccactagg 180
gcatctgggg tccctgatcg cttcataggc agtggatctg ggacagattt cactcttacc 240
atcagcagtg tgcaggctga agacctggca gattacttct gtcagcaaca ttatagtatt 300
ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac gggctgatgc tgcaccaact 360
gtatccatct tccctacc 378

<210> 100

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-410H3-Ab1-VH Peptidic sequence of the heavy chain
variable domain

<400> 100

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

Leu	Gln	Met	Thr	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Met	Tyr	Tyr	Cys
				85					90					95	
Ala	Arg	Ser	Gly	Thr	Thr	Val	Pro	Phe	Asp	Tyr	Trp	Gly	Gln	Gly	Thr
			100					105					110		
Ser	Leu	Thr	Val	Ser	Ser	Ala	Lys	Thr	Thr	Pro	Pro	Ser	Val	Tyr	Pro
		115					120					125			
Leu	Ala	Pro	Gly	Ser	Ala	Ala	Gln	Thr	Asn	Ser	Met	Val	Thr	Leu	Gly
	130					135					140				
Cys	Leu	Val	Lys	Gly	Tyr	Phe	Pro								
145					150										

<210> 101
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-410H3-Ab1-VH FR1

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

<210> 102
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-410H3-Ab1-VH CDR1

Ser	Phe	Gly	Met	His
1			5	

<210> 103
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-410H3-Ab1-VH FR2

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

<210> 104
 <211> 17

<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VH CDR2

<400> 104
Tyr Ile Arg Ser Gly Ser Asp Ile Ile Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15
Gly

<210> 105
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VH FR3

<400> 105
Arg Phe Thr Ile Ser Arg Asp Asn Pro Glu Asn Thr Leu Phe Leu Gln
1 5 10 15
Met Thr Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala Arg
 20 25 30

<210> 106
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VH CDR3

<400> 106
Ser Gly Thr Thr Val Pro Phe Asp Tyr
1 5

<210> 107
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VH FR4

<400> 107
Trp Gly Gln Gly Thr Ser Leu Thr Val Ser Ser

1 5 10

<210> 108
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VH Tail

<400> 108
Ala Lys Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Gly Ser Ala
1 5 10 15
Ala Gln Thr Asn Ser Met Val Thr Leu Gly Cys Leu Val Lys Gly Tyr
20 25 30
Phe Pro

<210> 109
<211> 456
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-410H3-Ab1-VH Nucleotide sequence of the heavy chain
variable domain

<400> 109
gatgtgcagc tgggtggagtc tgggggaggc ttagtgcagc ctggagggtc ccggagactc 60
tcctgtgcag cctctggatt cactttcagt agctttggaa tgcactgggt tcgtcaggct 120
ccagagaagg ggctggagtg ggtcgcatac attaggagtg gcagtgatat aatctactat 180
gcagactcag tgaagggccg attcaccatc tccagagaca atcccgagaa caccctgttc 240
ctgcaaatga ccagtctaag gtctgaggac acggccatgt attactgtgc aagatcaggg 300
actacgggtcc cctttgacta ctggggccaa ggcaccagtc tcacagtctc ttcagccaaa 360
acgacacccc catctgtcta tccactggcc cctggatctg ctgcccacaaac taactccatg 420
gtgaccctgg gatgcctggc caagggctat ttccct 456

<210> 110
<211> 126
<212> PRT
<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VL Peptide sequence of the light chain variable domain

<400> 110

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

<210> 111

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VL FR1

<400> 111

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

<210> 112

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VL CDR1

<400> 112

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

<210> 113

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VL FR2

<400> 113

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

<210> 114

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VL CDR2

<400> 114

Phe	Ala	Ser	Thr	Arg	Glu	Ser
1				5		

<210> 115

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VL FR3

<400> 115

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

<210> 116

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VL CDR3

<400> 116

Gln	Gln	His	Tyr	Ser	Ile	Pro	Leu	Thr
1				5				

<210> 117

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

<220>
<223> ACI-7062-414A5-Ab1-VL FR4

<400> 117
Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala
1 5 10

<210> 118
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-414A5-Ab1-VL Tail

<400> 118
Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Thr
1 5 10

<210> 119
<211> 378
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-414A5-Ab1-VL Nucleotide sequence of the light chain
variable domain

<400> 119
gacattgtga tgacacagtc tccatcctcc ctggctatgt cagtaggaca gaaggtcact 60
atgagctgca agtccagtca gaggcctttta aatagtagca atcaaaagaa ctatttggcc 120
tggtaccagc agaaaccagg acagtctcct aaacttctgg tatactttgc atccactagg 180
gaatctgggg tccctgatcg cttcataggc agtggatctg ggacagattt cactcttacc 240
atcaacagtg tgcaggctga agacctggca gattacttct gtcagcaaca ttatagtatt 300
ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac gggctgatgc tgcaccaact 360
gtatccatct tccctacc 378

<210> 120
<211> 152
<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VH Peptide sequence of the heavy chain variable domain

<400> 120

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

<210> 121

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VH FR1

<400> 121

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

<210> 122

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VH CDR1

<400> 122

Ser Phe Gly Met His
1 5

<210> 123
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-414A5-Ab1-VH FR2

<400> 123
Trp Val Arg Gln Ala Pro Glu Lys Gly Leu Glu Trp Val Ala
1 5 10

<210> 124
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-414A5-Ab1-VH CDR2

<400> 124
Tyr Ile Arg Ser Gly Ser Asp Ile Ile Tyr Tyr Ala Asp Thr Val Lys
1 5 10 15
Gly

<210> 125
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-414A5-Ab1-VH FR3

<400> 125
Arg Phe Thr Ile Ser Arg Asp Asn Pro Glu Asn Thr Leu Phe Leu Glu
1 5 10 15
Met Thr Arg Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala Arg
20 25 30

<210> 126
<211> 9
<212> PRT
<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VH CDR3

<400> 126

Ser Gly Thr Thr Val Pro Phe Asp Tyr
1 5

<210> 127

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VH FR4

<400> 127

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

<210> 128

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VH Tail

<400> 128

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

<210> 129

<211> 458

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VH Nucleotide sequence of the heavy chain
variable domain

<400> 129

gatgtgcagc tgggtggagtc tggggggaggc ttagtgcagc ctggagggtc ccggagactc 60
tcctgtgcag cctctggatt cactttcagt agcttttgaa tgcactgggt tcgtcaggct 120
ccagagaagg ggctggagtg ggtcgcatac attaggagtg gcagtgatat aatctactat 180

gcagacacag tgaagggccg attcaccatc tccagagaca atcccagaaa caccctgttt 240
 ttggaaatga ccagactaag gtctgaggac acggccatgt attactgtgc aagatcaggg 300
 actacggtcc cctttgacta ctggggccaa ggcaccagtc tcacagtctc ttcagccaaa 360
 acaacagccc catcgggtcta tccactggcc cctgtgtgtg gagatacaac tggctcctcg 420
 gtgactctag gatgcctggg caagggttat ttccctga 458

<210> 130
 <211> 125
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412E12-Ab1-VL Peptide sequence of the light chain variable domain

<400> 130
 Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ala Met Ser Val Gly
 1 5 10 15
 Gln Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Asn Ser
 20 25 30
 Gly Asp Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 Ser Pro Glu Leu Leu Leu Tyr Phe Ala Ser Thr Arg Ala Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ile Gly Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr
 65 70 75 80
 Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Asp Tyr Phe Cys Gln Gln
 85 90 95
 His Tyr Ser Ile Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
 100 105 110
 Lys Arg Ala Asp Ala Ala Pro Thr Val Ser Ile Phe Pro
 115 120 125

<210> 131
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412E12-Ab1-VL FR1

<400> 131
 Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ala Met Ser Val Gly
 1 5 10 15
 Gln Lys Val Thr Met Ser Cys
 20

<210> 132
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VL CDR1

<400> 132
Lys Ser Ser Gln Ser Leu Leu Asn Ser Gly Asp Gln Lys Asn Tyr Leu
1 5 10 15
Ala

<210> 133
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VL FR2

<400> 133
Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Glu Leu Leu Leu Tyr
1 5 10 15

<210> 134
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VL CDR2

<400> 134
Phe Ala Ser Thr Arg Ala Ser
1 5

<210> 135
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VL FR3

<400> 135
Gly Val Pro Asp Arg Phe Ile Gly Ser Gly Ser Gly Thr Asp Phe Ser
1 5 10 15
Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Asp Tyr Phe Cys

<210> 136
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VL CDR3

<400> 136
Gln Gln His Tyr Ser Ile Pro Leu Thr
1 5

<210> 137
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VL FR4

<400> 137
Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala
1 5 10

<210> 138
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VL Tail

<400> 138
Asp Ala Ala Pro Thr Val Ser Ile Phe Pro
1 5 10

<210> 139
<211> 375
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VL Nucleotidic sequence of the light chain
variable domain

<400> 139

gacattgtga tgacacagtc tccatcctcc ctggctatgt cagttggaca gaaggtcact 60
 atgagctgca agtccagtca gagcctttta aatagtggcg atcaaaagaa ctatttggcc 120
 tggtagcagc agaaaccagg acagtctcct gaacttctgt tatactttgc atccactagg 180
 gcatctgggg tccctgatcg cttcataggc agtggatctg ggacagattt ctctcttacc 240
 atcagcagtg tgcaggctga agacctggca gattacttct gtcagcaaca ttatagtatt 300
 ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac gggctgatgc tgcaccaact 360
 gtatccatct tcca 375

<210> 140
 <211> 128
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412E12-Ab1-VH Peptidic sequence of the heavy chain variable domain

<400> 140
 Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Arg Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Arg Phe
 20 25 30
 Gly Met His Trp Val Arg Gln Ala Pro Glu Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Tyr Ile Arg Ser Gly Ser Asp Ile Ile Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Pro Glu Asn Thr Leu Phe
 65 70 75 80
 Leu Gln Met Thr Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg Ser Gly Thr Thr Val Pro Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Ser Leu Thr Val Ser Ser Ala Lys Thr Thr Pro Pro Ser Val Tyr Pro
 115 120 125

<210> 141
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412E12-Ab1-VH FR1

<400> 141
Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Arg Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
20 25 30

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

<220>
<223> ACI-7062-412E12-Ab1-VH CDR1

<400> 142
Arg Phe Gly Met His
1 5

<210> 143
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VH FR2

<400> 143
Trp Val Arg Gln Ala Pro Glu Lys Gly Leu Glu Trp Val Ala
1 5 10

<210> 144
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VH CDR2

<400> 144
Tyr Ile Arg Ser Gly Ser Asp Ile Ile Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15
Gly

<210> 145
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> ACI-7062-412E12-Ab1-VH FR3

<400> 145

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

<210> 146

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-412E12-Ab1-VH CDR3

<400> 146

Ser	Gly	Thr	Thr	Val	Pro	Phe	Asp	Tyr
1				5				

<210> 147

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-412E12-Ab1-VH FR4

<400> 147

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

<210> 148

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-412E12-Ab1-VH Tail

<400> 148

Ala	Lys	Thr	Thr	Pro	Pro	Ser	Val	Tyr	Pro
1				5					10

<210> 149

<211> 384

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-412E12-Ab1-VH Nucleotidic sequence of the heavy chain variable domain

<400> 149

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gatgtgcagc tgggtggagtc tggggggaggc ttagtgcagc ctggagggtc ccggagactc      60
tcctgtgcag cctctggatt cactttcagt aggtttggaa tgcactgggt tcgccaggct      120
ccagagaagg ggctggagtg ggtcgcatat attaggagtg gcagtgatat aatctactat      180
gcagactcag tgaagggccg attcaccatc tccagagaca atcccagaaa caccctgttc      240
ctgcaaatga ccagtctaag gtctgaggac acggccatgt attactgtgc aagatcaggg      300
actacggtcc cctttgacta ctggggccaa ggcaccagtc tcacagtctc ttcagccaaa      360
acgacacccc catctgtcta tcca                                             384
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<210> 150

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VL Peptidic sequence of the light chain variable domain

<400> 150

```
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1           5           10          15
Asp Arg Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
          20          25          30
Ser Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
          35          40          45
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe 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 Leu Gly Val Tyr Tyr Cys Phe Gln Gly
          85          90          95
Ser Arg Val Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg
          100         105         110
Ala Asp Ala Ala Pro Thr Val Ser Ile
          115         120
```

<210> 151

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VL FR1

<400> 151

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

<210> 152

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VL CDR1

<400> 152

Arg	Ser	Ser	Gln	Ser	Ile	Val	His	Ser	Ser	Gly	Asn	Thr	Tyr	Leu	Glu
1			5					10					15		

<210> 153

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VL FR2

<400> 153

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

<210> 154

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VL CDR2

<400> 154

Lys	Val	Ser	Asn	Arg	Phe	Ser									
1			5												

<210> 155

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VL FR3

<400> 155

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	Leu	Gly	Val	Tyr	Tyr	Cys
			20					25					30		

<210> 156

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VL CDR3

<400> 156

Phe	Gln	Gly	Ser	Arg	Val	Pro	Thr
1				5			

<210> 157

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VL FR4

<400> 157

Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys	Arg	Ala
1				5				10			

<210> 158

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VH Tail

<400> 158

Asp	Ala	Ala	Pro	Thr	Val	Ser	Ile
1				5			

<210> 159

<211> 364
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> ACI-7062-416A11-Ab1-VL Nucleotidic Sequence of the light chain variable domain

<400> 159
 gatgttttga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcgagcctcc 60
 atctcttgca gatctagtca gagcattgta catagtagtg gaaacaccta tttagaatgg 120
 tacctgcaga agccaggcca gtctccaaag ctctgatct acaaagtttc caaccgattt 180
 tctgggggtcc cagacagggt cagtggcagt ggatcaggga cagatttcac actcaagatc 240
 agcagagtgg aggctgagga tctgggagtt tattactgct ttcaaggttc acgtgttccc 300
 acgttcggtg ctgggaccaa gctggagctg aaacgggctg atgctgcacc aactgtatcc 360
 atct 364

<210> 160
 <211> 144
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-416A11-Ab1-VH Peptidic sequence of the heavy chain variable domain

<400> 160
 Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Ser Ser Gln
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser Thr Tyr
 20 25 30
 Gly Ile Gly Val Gly Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu
 35 40 45
 Trp Leu Ala His Ile Trp Trp Asn Asp Asn Lys Tyr Tyr Asn Thr Ala
 50 55 60
 Leu Lys Ser Arg Leu Thr Ile Ser Lys Asp Thr Ser Asn Asn Gln Val
 65 70 75 80
 Phe Leu Lys Ile Ala Ser Val Asp Thr Ala Asp Ala Ala Thr Tyr Tyr
 85 90 95
 Cys Ala Arg Val Tyr Gly Asn Leu Tyr Tyr Phe Gly Tyr Trp Gly Gln
 100 105 110
 Gly Thr Thr Leu Thr Val Ser Ser Ala Lys Thr Thr Ala Pro Ser Val
 115 120 125
 Tyr Pro Leu Ala Pro Val Cys Gly Asp Thr Thr Gly Ser Ser Val Thr
 130 135 140

<210> 161
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-416A11-Ab1-VH FR1

<400> 161
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Ser Ser Gln
1 5 10 15
Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser
 20 25 30

<210> 162
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-416A11-Ab1-VH CDR1

<400> 162
Thr Tyr Gly Ile Gly Val Gly
1 5

<210> 163
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-416A11-Ab1-VH FR2

<400> 163
Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu Trp Leu Ala
1 5 10

<210> 164
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-416A11-Ab1-VH CDR2

<400> 164

His Ile Trp Trp Asn Asp Asn Lys Tyr Tyr Asn Thr Ala Leu Lys Ser
1 5 10 15

<210> 165

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VH FR3

<400> 165

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

<210> 166

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VH CDR3

<400> 166

Val Tyr Gly Asn Leu Tyr Tyr Phe Gly Tyr
1 5 10

<210> 167

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VH FR4

<400> 167

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

<210> 168

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VH Tail

<400> 168

Ala	Lys	Thr	Thr	Ala	Pro	Ser	Val	Tyr	Pro	Leu	Ala	Pro	Val	Cys	Gly
1				5				10						15	
Asp	Thr	Thr	Gly	Ser	Ser	Val	Thr								
			20												

<210> 169

<211> 433

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-416A11-Ab1-VH Nucleotide sequence of the heavy chain variable domain

<400> 169

caggttactc	tgaaagagtc	tggccctggg	atattgcagt	cctcccagac	cctcagtctg	60
acttgttctt	tctctggatt	ttcactgagc	acttatggta	taggagtagg	ctggattcgt	120
cagccttcag	ggaagggctc	ggagtggctg	gcacacattt	ggtggaatga	taataagtac	180
tataacacag	ccctgaagag	ccgactcaca	atctccaagg	atacctcaa	caaccaggta	240
ttcctcaaga	tcgccagtgt	ggacactgca	gatgctgcca	catactactg	tgctcgagtc	300
tatggtaacc	tatactactt	tggctactgg	ggccaaggca	ccactctcac	agtctcctca	360
gccaaaacaa	cagccccatc	ggtctatcca	ctggcccctg	tgtgtggaga	tacaactggc	420
tcctcgggtga	ctc					433

<210> 170

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-406E3-Ab2-VL Peptide sequence of the light chain variable domain

<400> 170

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

Pro	Lys	Leu	Leu	Ile	Tyr	Lys	Val	Ser	Asn	Arg	Phe	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	Leu	Gly	Val	Tyr	Tyr	Cys	Phe	Gln	Gly
				85					90					95	
Ser	His	Val	Pro	Thr	Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys	Arg
			100					105					110		

Ala

<210> 171
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-406E3-Ab2-VL-FR1

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

<210> 172
 <211> 16
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-406E3-Ab2-VL-CDR1

Arg	Ser	Ser	Gln	Ser	Ile	Val	His	Arg	Ser	Gly	Asn	Thr	Tyr	Leu	Glu
1				5					10					15	

<210> 173
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-406E3-Ab2-VL-FR2

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

<210> 174
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VL-CDR2

<400> 174
Lys Val Ser Asn Arg Phe Ser
1 5

<210> 175
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VL-FR3

<400> 175
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 Leu Gly Val Tyr Tyr Cys
20 25 30

<210> 176
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VL-CDR3

<400> 176
Phe Gln Gly Ser His Val Pro Thr
1 5

<210> 177
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VL-FR4

<400> 177
Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala

1 5 10

<210> 178
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VL-Tail

<400> 178
Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu Gln
1 5 10 15

<210> 179
<211> 339
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VL Nucleotide sequence of the light chain
variable domain without tail

<400> 179
gatgttttga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcgagcctcc 60
atctcttgca gatctagtca gagcattgta catcgtagtg gaaacaccta ttagagtgg 120
tacctgcaga aaccaggcca gtctccaaag ctctgatct acaaagtttc caaccgattt 180
tctgggggtcc cagacagggt cagtggcagt ggatcaggga cagatttcac actcaagatc 240
agcagagtgg aggctgagga tctgggagtt tattactgct ttcaagggtt acatgttccc 300
acgttcggtg ctgggaccaa gctggagctg aaacgggct 339

<210> 180
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VH Peptide sequence of the heavy chain
variable domain

<400> 180
Gln Val Thr Leu Lys Glu Ser Gly Pro Ala Ile Leu Gln Pro Ser Gln
1 5 10 15
Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Thr Thr Tyr
20 25 30

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

<210> 181
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-406E3-Ab2-VH-FR1

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

<210> 182
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-406E3-Ab2-VH-CDR1

Thr	Tyr	Gly	Ile	Gly	Val	Gly
1			5			

<210> 183
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-406E3-Ab2-VH-FR2

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

<210> 184
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VH-CDR2

<400> 184
His Ile Trp Trp Asn Asp Asn Lys Tyr Tyr Asn Thr Ala Leu Lys Ser
1 5 10 15

<210> 185
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VH-FR3

<400> 185
Arg Leu Thr Val Ser Lys Asp Thr Ser Asn Asn Gln Val Phe Leu Lys
1 5 10 15
Ile Ala Ser Val Asp Thr Ala Asp Thr Ala Thr Tyr Tyr Cys Ala Arg
20 25 30

<210> 186
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VH-CDR3

<400> 186
Val Tyr Gly Asn Leu Tyr Tyr Phe Ala Tyr
1 5 10

<210> 187
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VH-FR4

<400> 187
Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser
1 5 10

<210> 188
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VH-Tail

<400> 188
Ala Lys Thr Thr Ala Pro Ser Val Tyr Pro Leu Ala Pro Val Cys Gly
1 5 10 15
Asp Thr Thr Gly Ser Ser Val Thr Leu
20 25

<210> 189
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-406E3-Ab2-VH Nucleotide sequence of the heavy chain
variable domain without tail

<400> 189
caggttactc tgaaagagtc tggccctgcg atattgcagc cctcccagac cctcagtctg 60
acttgttctt tctctggggtt ttcactgacc acttatggta taggagtagg ctggattcgt 120
cagccttcag ggaaggggtct ggagtggctg gcacacattt ggtggaatga taataagtac 180
tataacacag ccctgaagag ccggctcact gtctccaagg atacctcaa caaccaggta 240
ttcctcaaga tcgccagtgt agacactgca gatactgcca catactactg tgctcgagtc 300
tatggtaacc tgtactactt tgcctactgg ggccaaggca ccactctcac agtctcctca 360

<210> 190
<211> 113
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-415C4-Ab1-VL Peptide sequence of the light chain
variable domain

<400> 190

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

<210> 191
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-415C4-Ab1-VL-FR1

<400> 191
 Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
 1 5 10 15
 Asp Gln Ala Ser Ile Ser Cys
 20

<210> 192
 <211> 16
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-415C4-Ab1-VL-CDR1

<400> 192
 Arg Ser Ser Gln Ser Ile Val His Ser Thr Gly Asn Thr Tyr Leu Glu
 1 5 10 15

<210> 193
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>

<223> ACI-7062-415C4-Ab1-VL-FR2

<400> 193

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

<210> 194

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415C4-Ab1-VL-CDR2

<400> 194

Lys	Val	Ser	Asn	Arg	Phe	Ser
1				5		

<210> 195

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415C4-Ab1-VL-FR3

<400> 195

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	Leu	Gly	Val	Tyr	Tyr	Cys
			20					25					30		

<210> 196

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415C4-Ab1-VL-CDR3

<400> 196

Phe	Gln	Gly	Ser	Arg	Val	Pro	Thr
1				5			

<210> 197

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415C4-Ab1-VL-FR4

<400> 197

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala
1 5 10

<210> 198

<211> 51

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415C4-Ab1-VL-Tail

<400> 198

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

<210> 199

<211> 339

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-415C4-Ab1-VL Nucleotide sequence of the light chain
variable domain without tail

<400> 199

gatgttttga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60
atctcttgca gatctagtca gagcattgta catagtactg gaaacaccta tttggaatgg 120
tacctgcaga aaccaggcca gtctccaaag ctcctgatct acaaagtttc caaccgattt 180
tctgggggtcc cagacagggt cagtggcagt ggatcaggga cagatttcac actcaagatc 240
agcagagtgg aggctgagga tctgggagtt tattactgct ttcaagggtt acgtgttccc 300
acgttcggtg ctgggaccaa gctggagctg aaacgggct 339

<210> 200

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415C4-Ab1-VH Peptide sequence of the heavy chain variable domain

<400> 200

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

<210> 201

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415C4-Ab1-VH-FR1

<400> 201

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

<210> 202

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415C4-Ab1-VH-CDR1

<400> 202

```
Thr Tyr Gly Ile Gly Val Gly
1          5
```

<210> 203

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

<220>
<223> ACI-7062-415C4-Ab1-VH-FR2

<400> 203
Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu Trp Leu Ala
1 5 10

<210> 204
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-415C4-Ab1-VH-CDR2

<400> 204
His Ile Trp Trp Asn Asp Asn Lys Tyr Tyr Lys Thr Ala Leu Lys Ser
1 5 10 15

<210> 205
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-415C4-Ab1-VH-FR3

<400> 205
Arg Leu Thr Ile Ser Lys Asp Thr Ser Asn Asn Gln Val Phe Leu Lys
1 5 10 15
Ile Ala Ser Val Asp Thr Ala Asp Ser Ala Thr Tyr Tyr Cys Ala Arg
20 25 30

<210> 206
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-415C4-Ab1-VH-CDR3

<400> 206

Val Tyr Gly Asn Leu Tyr Tyr Phe Gly Tyr
1 5 10

<210> 207
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-415C4-Ab1-VH-FR4

<400> 207
Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser
1 5 10

<210> 208
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-415C4-Ab1-VH-Tail

<400> 208
Ala Lys Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Gly Ser Ala
1 5 10 15
Ala Gln Thr Asn Ser Met Val Thr Leu Gly Cys Leu Val Lys Gly Tyr
20 25 30

<210> 209
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-415C4-Ab1-VH Nucleotide sequence of the heavy chain
variable domain without tail

<400> 209
caggttactc tgaaagagtc tggccctggg atattgcagc cctcccagac cctcagtctg 60
acttgttctt tctctggggtt ttactgagc acttatggta taggagtagg ctggattcgt 120
cagccctcag ggaagggtct ggagtggctg gcacacattt ggtggaatga taataagtac 180
tataagacag ccctgaagag ccggctcaca atctccaagg acacctcaa caaccaggtt 240
ttcctcaaga tcgccagtgt ggacactgca gattctgcca catactactg tgctcagatc 300

tatggtaacc tgtactactt tggctactgg ggccaaggca ccactctcac agtctcctca 360

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

<220>
<223> ACI-7062-415H10-Ab2-VL Peptide sequence of the light chain variable domain

<400> 210
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ala Met Ser Val Gly
1 5 10 15
Gln Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Asn Ser
20 25 30
Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Ser Pro Lys Leu Leu Ile Tyr Phe Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ile Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Asp Tyr Phe Cys Gln Gln
85 90 95
His Tyr Gly Ile Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
100 105 110
Lys Arg Ala
115

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

<220>
<223> ACI-7062-415H10-Ab2-VL-FR1

<400> 211
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ala Met Ser Val Gly
1 5 10 15
Gln Lys Val Thr Met Ser Cys
20

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

<220>
<223> ACI-7062-415H10-Ab2-VL-CDR1

<400> 212

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

<210> 213

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VL-FR2

<400> 213

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

<210> 214

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VL-CDR2

<400> 214

Phe Ala Ser Thr Arg Glu Ser
1 5

<210> 215

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VL-FR3

<400> 215

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

<210> 216

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VL-CDR3

<400> 216

Gln Gln His Tyr Gly Ile Pro Leu Thr
1 5

<210> 217

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VL-FR4

<400> 217

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg Ala
1 5 10

<210> 218

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VL-Tail

<400> 218

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

<210> 219

<211> 345

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VL Nucleotide sequence of the light chain
variable domain without tail

<400> 219

gacattgtga tgacacagtc tccatcctcc ctggctatgt cagtaggaca gaaggtcact	60
atgagctgca agtccagtca gaggctttta aatagtagca atcaaaagaa ctatttggcc	120
tggtagcagc agaaaccagg acagtctcct aaacttctaa tatactttgc atccactagg	180
gaatctgggg tccctgatcg cttcataggc agtggatctg ggacagattt cactcttacc	240

atcagcagtg tgcaggctga agacctggca gattacttct gtcagcaaca ttatggcatt 300
 ccgctcacgt tcggtgctgg gaccaagctg gaactgaaac gggct 345

<210> 220
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-415H10-Ab2-VH Peptide sequence of the heavy chain
 variable domain

<400> 220
 Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Arg Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe
 20 25 30
 Gly Met His Trp Val Arg Gln Ala Pro Glu Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Tyr Ile Ser Ser Gly Ser Ser Asn Ile Tyr Tyr Thr Asp Thr Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Pro Lys Asn Thr Leu Phe
 65 70 75 80
 Leu Gln Met Thr Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys
 85 90 95
 Ala Arg Ser Gly Thr Thr Val Pro Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Thr Leu Thr Val Ser Ser
 115

<210> 221
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-415H10-Ab2-VH-FR1

<400> 221
 Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Arg Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
 20 25 30

<210> 222
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VH-CDR1

<400> 222

Ser Phe Gly Met His
1 5

<210> 223

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VH-FR2

<400> 223

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

<210> 224

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VH-CDR2

<400> 224

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

<210> 225

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-415H10-Ab2-VH-FR3

<400> 225

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

<210> 226

<211> 9

<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-415H10-Ab2-VH-CDR3

<400> 226
Ser Gly Thr Thr Val Pro Phe Asp Tyr
1 5

<210> 227
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-415H10-Ab2-VH-FR4

<400> 227
Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser
1 5 10

<210> 228
<211> 26
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-415H10-Ab2-VH-Tail

<400> 228
Ala Thr Thr Thr Ala Pro Ser Val Tyr Pro Leu Val Pro Gly Cys Ser
1 5 10 15
Asp Thr Ser Gly Ser Ser Val Thr Leu Gly
20 25

<210> 229
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-415H10-Ab2-VH Nucleotide sequence of the heavy chain
variable domain without tail

<400> 229
gatgtgcagc tgggtggagtc ggggggaggc ttagtgcagc ctggagggtc ccggaaactc 60
tcctgtgcag cctctggatt cactttcagt agctttggaa tgcactgggt tcgtcaggct 120

ccagagaagg ggctggagtg ggtcgcatac attagtagtg gcagtagtaa catctactat 180
acagacacag tgaagggccg attcaccatc tctagagaca atcccaagaa caccctgttc 240
ctgcaaatga ccagtctaag gtctgaggac acggccatat attactgtgc aagatcaggg 300
actacggtcc cctttgacta ctggggccaa ggcaccactc tcacagtctc ctca 354

<210> 230
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-401A2-Ab2-VL Peptide sequence of the light chain variable domain without tail

<400> 230
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ala Met Ser Val Gly
1 5 10 15
Gln Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Asn Ser
20 25 30
Gly Asp Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Ser Pro Glu Leu Leu Leu Tyr Phe Ala Ser Thr Arg Ala Ser Gly Val
50 55 60
Pro Asp Arg Phe Ile Gly Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr
65 70 75 80
Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Asp Tyr Phe Cys Gln Gln
85 90 95
His Tyr Ser Ile Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
100 105 110
Lys Arg Ala
115

<210> 231
<211> 345
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-401A2-Ab2-VL Nucleotide sequence of the light chain variable domain without tail

<400> 231
gacattgtga tgacacagtc tccatcctcc ctggctatgt cagttggaca gaaggtcact 60
atgagctgca agtccagtca gagcctttta aatagtggcg atcaaaagaa ctatttggcc 120
tggtaccagc agaaaccagg acagtctcct gaacttctgt tatactttgc atccactagg 180

gcatctgggg tccctgatcg cttcataggc agtggatctg ggacagattt ctctcttacc 240
atcagcagtg tgcaggctga agacctggca gattacttct gtcagcaaca ttatagtatt 300
ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac gggct 345

<210> 232
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-401A2-Ab2-VH Peptide sequence of the heavy chain variable domain without tail

<400> 232
Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Arg Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Arg Phe
20 25 30
Gly Met His Trp Val Arg Gln Ala Pro Glu Lys Gly Leu Glu Trp Val
35 40 45
Ala Tyr Ile Arg Ser Gly Ser Asp Ile Ile Tyr Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Pro Glu Asn Thr Leu Phe
65 70 75 80
Leu Gln Met Thr Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys
85 90 95
Ala Arg Ser Gly Thr Thr Val Pro Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110
Ser Leu Thr Val Ser Ser
115

<210> 233
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-401A2-Ab2-VH Nucleotide sequence of the heavy chain variable domain without tail

<400> 233
gatgtgcagc tggtggagtc tgggggaggc ttagtgcagc ctggagggtc ccggagactc 60
tcctgtgcag cctctggatt cactttcagt aggtttggaa tgcactgggt tcgccaggct 120
ccagagaagg ggctggagtg ggtcgcatac attaggagtg gcagtgatat aatctactat 180
gcagactcag tgaagggccg attcaccatc tccagagaca atcccagaa caccctgttc 240

ctgcaaatga ccagtctaag gtctgaggac acggccatgt attactgtgc aagatcaggg 300
 actacgggtcc cctttgacta ctggggccaa ggcaccagtc tcacagtctc ttca 354

<210> 234
 <211> 115
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412A7-Ab1-VL Peptide sequence of the light chain variable domain without tail

<400> 234
 Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ala Met Ser Val Gly
 1 5 10 15
 Gln Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Asn Ser
 20 25 30
 Gly Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 35 40 45
 Ser Pro Glu Leu Leu Leu Tyr Phe Ala Ser Thr Arg Ala Ser Gly Val
 50 55 60
 Pro Asp Arg Phe Ile Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Asp Tyr Phe Cys Gln Gln
 85 90 95
 His Tyr Ser Ile Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
 100 105 110
 Lys Arg Ala
 115

<210> 235
 <211> 345
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412A7-Ab1-VL Nucleotide sequence of the light chain variable domain without tail

<400> 235
 gacattgtga tgacacagtc tccatcctcc ctggctatgt cagttggaca gaaggtcact 60
 atgagctgca agtccagtca gaggcctttta aatagtggca atcaaaagaa ctatttggcc 120
 tgggtaccagc agaaaccagg acagtctcct gaacttctat tatactttgc atccactagg 180
 gcatctggggg tccctgatcg cttcataggc agtggatctg ggacagattt cactcttacc 240
 atcagcagtg tgcaggctga agacctggca gattacttct gtcagcaaca ttatagtatt 300

ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac gggct

345

<210> 236

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-412A7-Ab1-VH Peptide sequence of the heavy chain variable domain without tail

<400> 236

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

<210> 237

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-412A7-Ab1-VH Nucleotide sequence of the heavy chain variable domain without tail

<400> 237

gatgtgcagc	tggtggagtc	tgggggaggc	ttagtgcagc	ctggagggtc	ccggagactc	60
tcctgtgcag	cctctggatt	cactttcagt	agctttggaa	tgactgggt	tcgtcaggct	120
ccagagaagg	ggctggagtg	ggtcgcatac	attaggagtg	gcagtgatat	aatctactat	180
gcagactcag	tgaagggccg	attcaccatc	tccagagaca	atcccgagaa	caccctgttc	240
ctgcaaatga	ccagtctaag	gtctgaggac	acggccatgt	attactgtgc	aagatcaggg	300
actacggtcc	cctttgacta	ctggggccaa	ggcaccagtc	tcacagtctc	ttca	354

<210> 238
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-406E3-Ab1-VL Peptide sequence of the light chain variable domain without tail

<400> 238
 Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
 1 5 10 15
 Asp Arg Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Arg
 20 25 30
 Ser Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45
 Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe 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 Leu Gly Val Tyr Tyr Cys Phe Gln Gly
 85 90 95
 Ser His Val Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg
 100 105 110
 Ala

<210> 239
 <211> 339
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> ACI-7062-406E3-Ab1-VL Nucleotide sequence of the light chain variable domain without tail

<400> 239
 gatgttttga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcgagcctcc 60
 atctcttgca gatctagtca gagcattgta catcgtagtg gaaacaccta ttagagtggt 120
 tacctgcaga aaccaggcca gtctccaaag ctctgatctt acaaagtttc caaccgattt 180
 tctgggggtcc cagacagggt cagtggcagt ggatcaggga cagatttcac actcaagatc 240
 agcagagtgg aggctgagga tctgggagtt tattactgct ttcaagggtt acatgttccc 300
 acgttcggtg ctgggaccaa gctggagctg aaacgggct 339

<210> 240

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

<220>

<223> ACI-7062-406E3-Ab1-VH Peptide sequence of the heavy chain variable domain without tail

<400> 240

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

<210> 241
<211> 360
<212> DNA
<213> Artificial Sequence

<220>

<223> ACI-7062-406E3-Ab1-VH Nucleotide sequence of the heavy chain variable domain without tail

<400> 241

```
caggttactc tgaaagagtc tggccctgcg atattgcagc cctcccagac ctcagtctg      60
acttgttctt tctctggggtt ttcactgacc acttatggta taggagtagg ctggattcgt      120
cagccttcag ggaagggtct ggagtggctg gcacacattt ggtggaatga taataagtac      180
tataacacag ccctgaagag ccggctcact gtctccaagg atacctcaa caaccaggta      240
ttcctcaaga tcgccagtgt agacactgca gatactgcca catactactg tgctcgagtc      300
tatggtaacc tgtactactt tgcctactgg ggccaaggca ccactctcac agtctcctca      360
```

<210> 242
<211> 113
<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL Peptide sequence of the light chain variable domain without tail

<400> 242

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

<210> 243

<211> 339

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VL Nucleotide sequence of the light chain variable domain without tail

<400> 243

```
gatgttttga tgacccaaac tccactctcc ctgcctgtca gtcttgagaga tcaagcctcc      60
atctcttgca gatctagtca gagcattgta catggttctg gaaacaccta tttagaatgg      120
tacctgcaga aaccaggcca gtctccaaag ctctgatct acaaagtttc caaccgattt      180
tctgggggtcc cagacagggt cagtggcagt ggatcaggga cagatttcac actcaggatc      240
agcagagtgg aggctgagga tctgggagtt tattactgct ttcaaggttc acatgttccc      300
acgttcggtg ctgggaccaa gctggagctg aaacgggct      339
```

<210> 244

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VH Peptide sequence of the heavy chain variable domain without tail

<400> 244

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

<210> 245

<211> 360

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-404D6-Ab2-VH Nucleotide sequence of the heavy chain variable domain without tail

<400> 245

caggttactc	tgaaagagtc	tggccctggg	atattgcagc	cctcccagac	cctcagtctg	60
acttgttctt	tctctgggtt	ttcactgagc	acttatggta	taggagtagg	ctggattcgt	120
cagccttcag	ggaagggtct	ggagtggctg	gcacacattt	ggtggaatga	ttataagtac	180
tataacacag	ccctgaagag	ccggctcaca	atctccaagg	atacctccaa	caaccgggta	240
ttcctcaaga	tcgccagtgt	ggacactgca	gatactgcca	catactactg	tgctcgagtc	300
tatggtaacc	tgtactactt	tgactactgg	ggccaaggca	ccactctcac	agtctctctca	360

<210> 246

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-410H3-Ab1-VL Peptide sequence of the light chain variable domain without tail

<400> 246

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

<210> 247

<211> 345

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-410H3-Ab1-VL Nucleotide sequence of the light chain variable domain without tail

<400> 247

```
gacattgtga tgacacagtc tccatcctcc ctggctatgt cagttggaca gaaggtcact      60
atgagctgca agtccagtca gagcctttta aatagtggca atcaaaagaa ctatttggcc      120
tggtaccagc agaaaccagg acagtctcct gaacttctgt tatactttgc atccactagg      180
gcatctgggg tccctgatcg cttcataggc agtggatctg ggacagattt cactcttacc      240
atcagcagtg tgcaggctga agacctggca gattacttct gtcagcaaca ttatagtatt      300
ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac gggct                      345
```

<210> 248

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-410H3-Ab1-VH Peptide sequence of the heavy chain variable domain without tail

<400> 248

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

<210> 249

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-410H3-Ab1-VH Nucleotide sequence of the heavy chain variable domain without tail

<400> 249

gatgtgcagc tggtggagtc tgggggaggc ttagtgcagc ctggagggtc ccggagactc 60
tcctgtgcag cctctggatt cactttcagt agctttggaa tgcactgggt tcgtcaggct 120
ccagagaagg ggctggagtg ggtcgcatat attaggagtg gcagtgatat aatctactat 180
gcagactcag tgaagggccg attcaccatc tccagagaca atcccgagaa caccctgttc 240
ctgcaaatga ccagtctaag gtctgaggac acggccatgt attactgtgc aagatcaggg 300
actacggtcc cctttgacta ctggggccaa ggcaccagtc tcacagtctc ttca 354

<210> 250

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VL Peptide sequence of the light chain variable domain without tail

<400> 250

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

<210> 251

<211> 345

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VL Nucleotide sequence of the light chain variable domain without tail

<400> 251

gacattgtga	tgacacagtc	tccatcctcc	ctggctatgt	cagtaggaca	gaaggtcact	60
atgagctgca	agtccagtc	gagcctttta	aatagtagca	atcaaaagaa	ctatttggcc	120
tggtaccagc	agaaaccagg	acagtctcct	aaacttctgg	tatactttgc	atccactagg	180
gaatctggggg	tccctgatcg	cttcataggc	agtggatctg	ggacagattt	cactcttacc	240
atcaacagtg	tgcaggctga	agacctggca	gattacttct	gtcagcaaca	ttatagtatt	300
ccgctcacgt	tcggtgctgg	gaccaagctg	gagctgaaac	gggct		345

<210> 252

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-414A5-Ab1-VH Peptide sequence of the heavy chain variable domain without tail

<400> 252

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

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

<210> 253
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> ACI-7062-414A5-Ab1-VH Nucleotide sequence of the heavy chain
variable domain without tail

<400> 253
gatgtgcagc tgggtggagtc tggggggaggc ttagtgcagc ctggagggtc ccggagactc 60
tcctgtgcag cctctggatt cactttcagt agctttggaa tgcactgggt tcgtcaggct 120
ccagagaagg ggctggagtg ggtcgcatac attaggagtg gcagtgatat aatctactat 180
gcagacacag tgaagggccg attcaccatc tccagagaca atcccgagaa caccctgttt 240
ttggaaatga ccagactaag gtctgaggac acggccatgt attactgtgc aagatcaggg 300
actacggtcc cctttgacta ctggggccaa ggcaccagtc tcacagtctc ttca 354

<210> 254
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> ACI-7062-412E12-Ab1-VL Peptide sequence of the light chain
variable domain without tail

<400> 254
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ala Met Ser Val Gly
1 5 10 15
Gln Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Asn Ser
20 25 30

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

<210> 255

<211> 345

<212> DNA

<213> Artificial Sequence

<220>

<223> ACI-7062-412E12-Ab1-VL Nucleotide sequence of the light chain variable domain without tail

<400> 255

gacattgtga	tgacacagtc	tccatcctcc	ctggctatgt	cagttggaca	gaaggtcact	60
atgagctgca	agtccagtc	gagcctttta	aatagtggcg	atcaaaagaa	ctatttggcc	120
tggtaccagc	agaaaccagg	acagtctcct	gaacttctgt	tatactttgc	atccactagg	180
gcatctgggg	tcctgatcg	cttcataggc	agtggatctg	ggacagattt	ctctcttacc	240
atcagcagtg	tgcaggctga	agacctggca	gattacttct	gtcagcaaca	ttatagtatt	300
ccgctcacgt	tcgggtgctgg	gaccaagctg	gagctgaaac	gggct		345

<210> 256

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> ACI-7062-412E12-Ab1-VH Peptide sequence of the heavy chain variable domain without tail

<400> 256

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

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

<210> 257
 <211> 354
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> ACI-7062-412E12-Ab1-VH Nucleotide sequence of the heavy chain variable domain without tail

<400> 257	
gatgtgcagc tgggtggagtc tgggggaggc ttagtgcagc ctggagggtc ccggagactc	60
tcctgtgcag cctctggatt cactttcagt aggtttggaa tgcactgggt tcgccaggct	120
ccagagaagg ggctggagtg ggtcgcatac attaggagtg gcagtgatat aatctactat	180
gcagactcag tgaagggccg attcaccatc tccagagaca atcccgagaa caccctgttc	240
ctgcaaatga ccagtctaag gtctgaggac acggccatgt attactgtgc aagatcaggg	300
actacggtcc cttttgacta ctggggccaa ggcaccagtc tcacagtctc ttca	354

<210> 258
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-416A11-Ab1-VL Peptide sequence of the light chain variable domain without tail

<400> 258	
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly	
1	5 10 15
Asp Arg Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser	
	20 25 30
Ser Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser	
	35 40 45
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe 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	Leu	Gly	Val	Tyr	Tyr	Cys	Phe	Gln	Gly
				85					90					95	
Ser	Arg	Val	Pro	Thr	Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys	Arg
			100					105					110		

Ala

<210> 259
 <211> 339
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> ACI-7062-416A11-Ab1-VL Nucleotide Sequence of the light chain variable domain without tail

<400> 259	
gatgttttga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcgagcctcc	60
atctcttgca gatctagtca gagcattgta catagtagtg gaaacaccta tttagaatgg	120
tacctgcaga agccaggcca gtctccaaag ctctgatct acaaagtttc caaccgattt	180
tctgggggtcc cagacagggt cagtggcagt ggatcaggga cagatttcac actcaagatc	240
agcagagtgg aggctgagga tctgggagtt tattactgct ttcaagggtc acgtgttccc	300
acgttcggtg ctgggaccaa gctggagctg aaacgggct	339

<210> 260
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> ACI-7062-416A11-Ab1-VH Peptide sequence of the heavy chain variable domain without tail

<400> 260	
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Ser Ser Gln	
1	5 10 15
Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser Thr Tyr	
	20 25 30
Gly Ile Gly Val Gly Trp Ile Arg Gln Pro Ser Gly Lys Gly Leu Glu	
	35 40 45
Trp Leu Ala His Ile Trp Trp Asn Asp Asn Lys Tyr Tyr Asn Thr Ala	
	50 55 60
Leu Lys Ser Arg Leu Thr Ile Ser Lys Asp Thr Ser Asn Asn Gln Val	
65	70 75 80

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

<210> 261
 <211> 360
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> ACI-7062-416A11-Ab1-VH Nucleotide sequence of the heavy chain variable domain without tail

<400> 261
 caggttactc tgaaagagtc tggccctggg atattgcagt cctcccagac cctcagtctg 60
 acttgttctt tctctggatt ttcactgagc acttatggta taggagtagg ctggattcgt 120
 cagccttcag ggaagggtct ggagtggctg gcacacattt ggtggaatga taataagtac 180
 tataacacag ccctgaagag ccgactcaca atctccaagg atacctcaa caaccaggta 240
 ttcctcaaga tcgccagtgt ggacactgca gatgctgcca catactactg tgctcgagtc 300
 tatggtaacc tatactactt tggctactgg ggccaaggca ccactctcac agtctcctca 360

<210> 262
 <211> 15
 <212> PRT
 <213> Mammalia

<220>
 <223> TP-23

<400> 262
 Thr Glu Asp Met Thr Glu Asp Glu Leu Arg Glu Phe Phe Ser Gln
 1 5 10 15

<210> 263
 <211> 15
 <212> PRT
 <213> Mammalia

<220>
 <223> TP-24

<400> 263

Arg Glu Phe Phe Ser Gln Tyr Gly Asp Val Met Asp Val Phe Ile
1 5 10 15

<210> 264

<211> 15

<212> PRT

<213> Mammalia

<220>

<223> TP-25

<400> 264

Val Met Asp Val Phe Ile Pro Lys Pro Phe Arg Ala Phe Ala Phe
1 5 10 15

<210> 265

<211> 15

<212> PRT

<213> Mammalia

<220>

<223> TP-26

<400> 265

Phe Arg Ala Phe Ala Phe Val Thr Phe Ala Asp Asp Gln Ile Ala
1 5 10 15

<210> 266

<211> 15

<212> PRT

<213> Mammalia

<220>

<223> TP-27

<400> 266

Ala Asp Asp Gln Ile Ala Gln Ser Leu Cys Gly Glu Asp Leu Ile
1 5 10 15

<210> 267

<211> 15

<212> PRT

<213> Mammalia

<220>

<223> TP-28

<400> 267

Cys Gly Glu Asp Leu Ile Ile Lys Gly Ile Ser Val His Ile Ser
1 5 10 15

<210> 268
<211> 15
<212> PRT
<213> Mammalia

<220>
<223> TP-29

<400> 268
Ile Ser Val His Ile Ser Asn Ala Glu Pro Lys His Asn Ser Asn
1 5 10 15

<210> 269
<211> 15
<212> PRT
<213> Mammalia

<220>
<223> TP-30

<400> 269
Pro Lys His Asn Ser Asn Arg Gln Leu Glu Arg Ser Gly Arg Phe
1 5 10 15

<210> 270
<211> 15
<212> PRT
<213> Mammalia

<220>
<223> TP-31

<400> 270
Glu Arg Ser Gly Arg Phe Gly Gly Asn Pro Gly Gly Phe Gly Asn
1 5 10 15

<210> 271
<211> 8
<212> PRT
<213> Mammalia

<220>
<223> TDP-208

<400> 271
Arg Glu Phe Phe Ser Gln Tyr Gly
1 5

<210> 272

<211> 8
<212> PRT
<213> Mammalia

<220>
<223> TDP-209

<400> 272
Glu Phe Phe Ser Gln Tyr Gly Asp
1 5

<210> 273
<211> 8
<212> PRT
<213> Mammalia

<220>
<223> TDP-210

<400> 273
Phe Phe Ser Gln Tyr Gly Asp Val
1 5

<210> 274
<211> 8
<212> PRT
<213> Mammalia

<220>
<223> TDP-211

<400> 274
Phe Ser Gln Tyr Gly Asp Val Met
1 5

<210> 275
<211> 8
<212> PRT
<213> Mammalia

<220>
<223> TDP-212

<400> 275
Ser Gln Tyr Gly Asp Val Met Asp
1 5

<210> 276
<211> 8
<212> PRT

<213> Mammalia

<220>

<223> TDP-213

<400> 276

Gln Tyr Gly Asp Val Met Asp Val
1 5

<210> 277

<211> 8

<212> PRT

<213> Mammalia

<220>

<223> TDP-214

<400> 277

Tyr Gly Asp Val Met Asp Val Phe
1 5

<210> 278

<211> 8

<212> PRT

<213> Mammalia

<220>

<223> TDP-215

<400> 278

Gly Asp Val Met Asp Val Phe Ile
1 5

<210> 279

<211> 8

<212> PRT

<213> Mammalia

<220>

<223> TDP-216

<400> 279

Asp Val Met Asp Val Phe Ile Pro
1 5

<210> 280

<211> 8

<212> PRT

<213> Mammalia

<220>

<223> TDP-217

<400> 280

Val Met Asp Val Phe Ile Pro Lys

1 5

<210> 281

<211> 8

<212> PRT

<213> Mammalia

<220>

<223> TDP-218

<400> 281

Met Asp Val Phe Ile Pro Lys Pro

1 5

<210> 282

<211> 8

<212> PRT

<213> Mammalia

<220>

<223> TDP-219

<400> 282

Asp Val Phe Ile Pro Lys Pro Phe

1 5

<210> 283

<211> 8

<212> PRT

<213> Mammalia

<220>

<223> TDP-220

<400> 283

Val Phe Ile Pro Lys Pro Phe Arg

1 5

<210> 284

<211> 8

<212> PRT

<213> Mammalia

<220>

<223> TDP-221

<400> 284

Phe Ile Pro Lys Pro Phe Arg Ala
1 5

<210> 285

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