

Sequence Listing

<110> SHANGHAI JUNSHI BIOSCIENCES CO., LTD.
SUZHOU JUNMENG BIOSCIENCES CO., LTD.

<120> ANTI-BTLA ANTIBODY PHARMACEUTICAL COMPOSITION AND USE THEREOF

<130> 19A872

<150> CN 202010066932.1

<151> 2020-01-20

<160> 12

<170> SIPOSequenceListing 1.0

<210> 1

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> HCDR1

<400> 1

His Thr Tyr Ala His

1 5

<210> 2

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> HCDR2

<400> 2

Ile Asp Pro Ala Asn Gly Asn Thr

1 5

<210> 3

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> HCDR3

<400> 3

Val Ala Asp His Tyr Gly Ser Ser Leu Leu Asp Tyr

1 5 10

<210> 4
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<220>
<223> LCDR1

<400> 4
Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr
1 5 10

<210> 5
<211> 3
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<213> Artificial Sequence

<220>
<223> LCDR2

<400> 5
Leu Val Ser
1

<210> 6
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> LCDR3

<400> 6
Trp Gln Gly Thr Tyr Phe Pro Tyr Thr
1 5

<210> 7
<211> 119
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<213> Artificial Sequence

<220>
<223> variable region of heavy chain

<400> 7
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
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Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Asn Phe Lys His Thr

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

<210> 8

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> variable region of light chain

<400> 8

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

<210> 9

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> variable region of light chain

<400> 9

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

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

<210> 10
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> variable region of light chain

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

<210> 11
 <211> 446
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> heavy chain

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

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

435

440

445

<210> 12

<211> 219

<212> PRT

<213> Artificial Sequence

<220>

<223> light chain

<400> 12

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Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
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Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser
20        25        30
Asp Gly Lys Thr Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln Ser
35        40        45
Pro Arg Arg Leu Ile Tyr Leu Val Ser Lys Leu Asp 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 Val Gly Val Tyr Tyr Cys Trp Gln Gly
85        90        95
Thr Tyr Phe Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100       105       110
Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115       120       125
Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130       135       140
Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145       150       155       160
Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165       170       175
Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
180       185       190
Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195       200       205
Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210       215

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