

SEQUENCE LISTING

.NeoTX Therapeutics Ltd <110>
CANCER TREATMENT <120>
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Asn Glu Lys Ala Ile Thr Glu Asn Lys Glu Ser Asp Asp Gln Phe Leu
45 40 35
Glu Asn Thr Leu Leu Phe Lys Gly Phe Phe Thr Gly His Pro Trp Tyr
60 55 50
Asn Asp Leu Leu Val Asp Leu Gly Ser Lys Asp Ala Thr Asn Lys Tyr
80 75 70 65
Lys Gly Lys Lys Val Asp Leu Tyr Gly Ala Tyr Tyr Gly Tyr Gln Cys
95 90 85
Ala Gly Gly Thr Pro Asn Lys Thr Ala Cys Met Tyr Gly Gly Val Thr
110 105 100
Leu His Asp Asn Asn Arg Leu Thr Glu Glu Lys Lys Val Pro Ile Asn
125 120 115
Leu Trp Ile Asp Gly Lys Gln Thr Thr Val Pro Ile Asp Lys Val Lys
140 135 130

Thr Ser Lys Lys Glu Val Thr Val Gln Glu Leu Asp Leu Gln Ala Arg
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His Tyr Leu His Gly Lys Phe Gly Leu Tyr Asn Ser Asp Ser Phe Gly
175 170 165

Gly Lys Val Gln Arg Gly Leu Ile Val Phe His Ser Ser Glu Gly Ser
190 185 180

Thr Val Ser Tyr Asp Leu Phe Asp Ala Gln Gly Gln Tyr Pro Asp Thr
205 200 195

Leu Leu Arg Ile Tyr Arg Asp Asn Lys Thr Ile Asn Ser Glu Asn Leu
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His Ile Asp Leu Tyr Leu Tyr Thr Thr
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Glu Leu Gln Gly Thr Ala Leu Gly Asn Leu Lys Gln Ile Tyr Tyr Tyr
30 25 20

Asn Glu Lys Ala Lys Thr Glu Asn Lys Glu Ser His Asp Gln Phe Leu
45 40 35

Gln His Thr Ile Leu Phe Lys Gly Phe Phe Thr Asp His Ser Trp Tyr
60 55 50

Asn Asp Leu Leu Val Asp Phe Asp Ser Lys Asp Ile Val Asp Lys Tyr
80 75 70 65

Lys Gly Lys Lys Val Asp Leu Tyr Gly Ala Tyr Tyr Gly Tyr Gln Cys
95 90 85

Ala Gly Gly Thr Pro Asn Lys Thr Ala Cys Met Tyr Gly Gly Val Thr
110 105 100

Leu His Asp Asn Asn Arg Leu Thr Glu Glu Lys Lys Val Pro Ile Asn
125 120 115

Leu Trp Leu Asp Gly Lys Gln Asn Thr Val Pro Leu Glu Thr Val Lys
140 135 130

Thr Asn Lys Lys Asn Val Thr Val Gln Glu Leu Asp Leu Gln Ala Arg
160 155 150 145

Arg Tyr Leu Gln Glu Lys Tyr Asn Leu Tyr Asn Ser Asp Val Phe Asp
175 170 165

Gly Lys Val Gln Arg Gly Leu Ile Val Phe His Thr Ser Thr Glu Pro
190 185 180

Ser Val Asn Tyr Asp Leu Phe Gly Ala Gln Gly Gln Tyr Ser Asn Thr
205 200 195

Leu Leu Arg Ile Tyr Arg Asp Asn Lys Thr Ile Asn Ser Glu Asn Met
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His Ile Asp Ile Tyr Leu Tyr Thr Ser
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Glu Leu Gln Gly Thr Ala Leu Gly Asn Leu Lys Gln Ile Tyr Tyr Tyr
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Asn Ser Lys Ala Ile Thr Ser Ser Glu Lys Ser Ala Asp Gln Phe Leu
45 40 35

Thr Asn Thr Leu Leu Phe Lys Gly Phe Phe Thr Gly His Pro Trp Tyr
60 55 50

Asn Asp Leu Leu Val Asp Leu Gly Ser Thr Ala Ala Thr Ser Glu Tyr
80 75 70 65

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

Ala Gly Gly Thr Pro Asn Lys Thr Ala Cys Met Tyr Gly Gly Val Thr
110 105 100

Leu His Asp Asn Asn Arg Leu Thr Glu Glu Lys Lys Val Pro Ile Asn
125 120 115

Leu Trp Ile Asp Gly Lys Gln Thr Thr Val Pro Ile Asp Lys Val Lys
140 135 130

Thr Ser Lys Lys Glu Val Thr Val Gln Glu Leu Asp Leu Gln Ala Arg
160 155 150 145

His Tyr Leu His Gly Lys Phe Gly Leu Tyr Asn Ser Asp Ser Phe Gly
175 170 165

Gly Lys Val Gln Arg Gly Leu Ile Val Phe His Ser Ser Glu Gly Ser
190 185 180

Thr Val Ser Tyr Asp Leu Phe Asp Ala Gln Gly Gln Tyr Pro Asp Thr
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Artificial Sequence <213>

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Light Chain <223>

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

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

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

Lys Asp Lys Val Thr Leu Thr Val Asp Glu Ser Ser Ser Thr Ala Tyr
80 75 70 65

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

Thr Arg Ser Pro Tyr Gly Tyr Asp Glu Tyr Gly Leu Asp Tyr Trp Gly
110 105 100

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

Val Tyr Pro Leu Ala Pro Gly Ser Ala Ala Gln Thr Asn Ser Met Val
140 135 130

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

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

Val	Leu	Gln	Ser	Asp	Leu	Tyr	Thr	Leu	Ser	Ser	Ser	Val	Thr	Val	Pro	
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Ser	Ser	Thr	Trp	Pro	Ser	Glu	Thr	Val	Thr	Cys	Asn	Val	Ala	His	Pro	
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Ala	Ser	Ser	Thr	Lys	Val	Asp	Lys	Lys	Ile	Val	Pro	Arg	Asp	Ser	Gly	
				220					215					210		
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Lys	Ser	Glu	Leu	Gln	Gly	Thr	Ala	Leu	Gly	Asn	Leu	Lys	Gln	Ile	Tyr	
	255					250					245					
Tyr	Tyr	Asn	Glu	Lys	Ala	Lys	Thr	Glu	Asn	Lys	Glu	Ser	His	Asp	Gln	
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Phe	Leu	Gln	His	Thr	Ile	Leu	Phe	Lys	Gly	Phe	Phe	Thr	Asp	His	Ser	
			285					280					275			
Trp	Tyr	Asn	Asp	Leu	Leu	Val	Asp	Phe	Asp	Ser	Lys	Asp	Ile	Val	Asp	
				300					295					290		
Lys	Tyr	Lys	Gly	Lys	Lys	Val	Asp	Leu	Tyr	Gly	Ala	Tyr	Tyr	Gly	Tyr	
320					315					310					305	
Gln	Cys	Ala	Gly	Gly	Thr	Pro	Asn	Lys	Thr	Ala	Cys	Met	Tyr	Gly	Gly	
	335					330					325					
Val	Thr	Leu	His	Asp	Asn	Asn	Arg	Leu	Thr	Glu	Glu	Lys	Lys	Val	Pro	
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Ile	Asn	Leu	Trp	Leu	Asp	Gly	Lys	Gln	Asn	Thr	Val	Pro	Leu	Glu	Thr	
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Val	Lys	Thr	Asn	Lys	Lys	Asn	Val	Thr	Val	Gln	Glu	Leu	Asp	Leu	Gln	
				380					375					370		
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415		410		405											
Glu	Pro	Ser	Val	Asn	Tyr	Asp	Leu	Phe	Gly	Ala	Gln	Gly	Gln	Tyr	Ser
		430					425					420			
Asn	Thr	Leu	Leu	Arg	Ile	Tyr	Arg	Asp	Asn	Lys	Thr	Ile	Asn	Ser	Glu
		445					440					435			
Asn	Met	His	Ile	Asp	Ile	Tyr	Leu	Tyr	Thr	Ser	Asp	Ile	Val	Met	Thr
				460					455					450	
Gln	Ser	Pro	Ser	Ser	Leu	Thr	Val	Thr	Ala	Gly	Glu	Lys	Val	Thr	Met
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Asn	Cys	Lys	Ser	Ser	Gln	Ser	Leu	Leu	Asn	Ser	Arg	Asn	Gln	Lys	Asn
	495					490					485				
Tyr	Leu	Thr	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro	Lys	Leu	Leu
		510					505					500			
Ile	Tyr	Trp	Ala	Ser	Thr	Arg	Glu	Ser	Gly	Val	Pro	Asp	Arg	Phe	Thr
			525					520					515		
Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Val	Gln
				540					535					530	
Ala	Glu	Asp	Leu	Ala	Val	Tyr	Tyr	Cys	Gln	Asn	Asp	Tyr	Val	Tyr	Pro
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Leu	Thr	Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys	Arg	Ala	Asp	Ala
	575					570					565				
Ala	Pro	Thr	Val	Ser	Ile	Phe	Pro	Pro	Ser	Ser	Glu	Gln	Leu	Thr	Ser
		590					585					580			
Gly	Gly	Ala	Ser	Val	Val	Cys	Phe	Leu	Asn	Asn	Phe	Tyr	Pro	Lys	Asp
			605					600					595		
Ile	Asn	Val	Lys	Trp	Lys	Ile	Asp	Gly	Ser	Glu	Arg	Gln	Asn	Gly	Val
				620					615					610	
Leu	Asn	Ser	Trp	Thr	Asp	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Met
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Ser Ser Thr Leu Thr Leu Thr Lys Asp Glu Tyr Glu Arg His Asn Ser
655 650 645

Tyr Thr Cys Glu Ala Thr His Lys Thr Ser Thr Ser Pro Ile Val Lys
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Mutated and Conjugated Protein <223>

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30 25 20

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45 40 35

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

Lys Asp Lys Ala Ile Leu Thr Val Asp Lys Ser Ser Thr Thr Ala Tyr
80 75 70 65

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

Ala Arg Ser Thr Met Ile Thr Asn Tyr Val Met Asp Tyr Trp Gly Gln
110 105 100

Val Thr Ser Val Thr Val Ser Ser Ala Lys Thr Thr Pro Pro Ser Val

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				140					135					130			
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		190					185					180					
Ser	Thr	Trp	Pro	Ser	Glu	Thr	Val	Thr	Cys	Asn	Val	Ala	His	Pro	Ala		
			205					200					195				
Ser	Ser	Thr	Lys	Val	Asp	Lys	Lys	Ile	Val	Pro	Arg	Asp	Ser	Gly	Gly		
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Pro	Ser	Glu	Lys	Ser	Glu	Glu	Ile	Asn	Glu	Lys	Asp	Leu	Arg	Lys	Lys		
240					235					230					225		
Ser	Glu	Leu	Gln	Gly	Thr	Ala	Leu	Gly	Asn	Leu	Lys	Gln	Ile	Tyr	Tyr		
	255					250					245						
Tyr	Asn	Glu	Lys	Ala	Lys	Thr	Glu	Asn	Lys	Glu	Ser	His	Asp	Gln	Phe		
		270					265					260					
Leu	Gln	His	Thr	Ile	Leu	Phe	Lys	Gly	Phe	Phe	Thr	Asp	His	Ser	Trp		
			285					280					275				
Tyr	Asn	Asp	Leu	Leu	Val	Asp	Phe	Asp	Ser	Lys	Asp	Ile	Val	Asp	Lys		
				300					295					290			
Tyr	Lys	Gly	Lys	Lys	Val	Asp	Leu	Tyr	Gly	Ala	Tyr	Tyr	Gly	Tyr	Gln		
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Cys	Ala	Gly	Gly	Thr	Pro	Asn	Lys	Thr	Ala	Cys	Met	Tyr	Gly	Gly	Val		
	335					330					325						
Thr	Leu	His	Asp	Asn	Asn	Arg	Leu	Thr	Glu	Glu	Lys	Lys	Val	Pro	Ile		
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Asn	Leu	Trp	Leu	Asp	Gly	Lys	Gln	Asn	Thr	Val	Pro	Leu	Glu	Thr	Val	365	360	355
Lys	Thr	Asn	Lys	Lys	Asn	Val	Thr	Val	Gln	Glu	Leu	Asp	Leu	Gln	Ala	380	375	370
Arg	Arg	Tyr	Leu	Gln	Glu	Lys	Tyr	Asn	Leu	Tyr	Asn	Ser	Asp	Val	Phe	400	395	390
Asp	Gly	Lys	Val	Gln	Arg	Gly	Leu	Ile	Val	Phe	His	Thr	Ser	Thr	Glu	415	410	405
Pro	Ser	Val	Asn	Tyr	Asp	Leu	Phe	Gly	Ala	Gln	Gly	Gln	Tyr	Ser	Asn	430	425	420
Thr	Leu	Leu	Arg	Ile	Tyr	Arg	Asp	Asn	Lys	Thr	Ile	Asn	Ser	Glu	Asn	445	440	435
Met	His	Ile	Ala	Ile	Tyr	Leu	Tyr	Thr	Ser	Ser	Ile	Val	Met	Thr	Gln	460	455	450
Thr	Pro	Thr	Ser	Leu	Leu	Val	Ser	Ala	Gly	Asp	Arg	Val	Thr	Ile	Thr	480	475	470
Cys	Lys	Ala	Ser	Gln	Ser	Val	Ser	Asn	Asp	Val	Ala	Trp	Tyr	Gln	Gln	495	490	485
Lys	Pro	Gly	Gln	Ser	Pro	Lys	Leu	Leu	Ile	Ser	Tyr	Thr	Ser	Ser	Arg	510	505	500
Tyr	Ala	Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	525	520	515
Phe	Thr	Leu	Thr	Ile	Ser	Ser	Val	Gln	Ala	Glu	Asp	Leu	Ala	Val	Tyr	540	535	530
Phe	Cys	Gln	Gln	Asp	Tyr	Asn	Ser	Pro	Pro	Thr	Phe	Gly	Gly	Gly	Thr	560	555	550
Lys	Leu	Glu	Ile	Lys	Arg	Ala	Asp	Ala	Ala	Pro	Thr	Val	Ser	Ile	Phe	575	570	565
Pro	Pro	Ser	Ser	Glu	Gln	Leu	Thr	Ser	Gly	Gly	Ala	Ser	Val	Val	Cys			

Met	Glu	Leu	Arg	Ser	Leu	Thr	Ser	Glu	Asp	Ser	Ala	Val	Tyr	Tyr	Cys	95	90	85
Ala	Arg	Ser	Thr	Met	Ile	Thr	Asn	Tyr	Val	Met	Asp	Tyr	Trp	Gly	Gln	110	105	100
Gly	Thr	Ser	Val	Thr	Val	Ser	Ser	Ala	Lys	Thr	Thr	Pro	Pro	Ser	Val	125	120	115
Tyr	Pro	Leu	Ala	Pro	Gly	Ser	Ala	Ala	Gln	Thr	Asn	Ser	Met	Val	Thr	140	135	130
Leu	Gly	Cys	Leu	Val	Lys	Gly	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Thr	160	155	150
Trp	Asn	Ser	Gly	Ser	Leu	Ser	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	175	170	165
Leu	Gln	Ser	Asp	Leu	Tyr	Thr	Leu	Ser	Ser	Ser	Val	Thr	Val	Pro	Ser	190	185	180
Ser	Thr	Trp	Pro	Ser	Glu	Thr	Val	Thr	Cys	Asn	Val	Ala	His	Pro	Ala	205	200	195
Ser	Ser	Thr	Lys	Val	Asp	Lys	Lys	Ile	Val	Pro	Arg	Asp	Ser	Gly	Gly	220	215	210
Pro	Ser	Glu	Lys	Ser	Glu	Glu	Ile	Asn	Glu	Lys	Asp	Leu	Arg	Lys	Lys	240	235	230
Ser	Glu	Leu	Gln	Gly	Thr	Ala	Leu	Gly	Asn	Leu	Lys	Gln	Ile	Tyr	Tyr	255	250	245
Tyr	Asn	Ser	Lys	Ala	Ile	Thr	Ser	Ser	Glu	Lys	Ser	Ala	Asp	Gln	Phe	270	265	260
Leu	Thr	Asn	Thr	Leu	Leu	Phe	Lys	Gly	Phe	Phe	Thr	Gly	His	Pro	Trp	285	280	275
Tyr	Asn	Asp	Leu	Leu	Val	Asp	Leu	Gly	Ser	Thr	Ala	Ala	Thr	Ser	Glu	300	295	290
Tyr	Glu	Gly	Ser	Ser	Val	Asp	Leu	Tyr	Gly	Ala	Tyr	Tyr	Gly	Tyr	Gln			

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Cys	Ala	Gly	Gly	Thr	Pro	Asn	Lys	Thr	Ala	Cys	Met	Tyr	Gly	Gly	Val	
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Thr	Leu	His	Asp	Asn	Asn	Arg	Leu	Thr	Glu	Glu	Lys	Lys	Val	Pro	Ile	
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Asn	Leu	Trp	Ile	Asp	Gly	Lys	Gln	Thr	Thr	Val	Pro	Ile	Asp	Lys	Val	
			365					360					355			
Lys	Thr	Ser	Lys	Lys	Glu	Val	Thr	Val	Gln	Glu	Leu	Asp	Leu	Gln	Ala	
				380					375					370		
Arg	His	Tyr	Leu	His	Gly	Lys	Phe	Gly	Leu	Tyr	Asn	Ser	Asp	Ser	Phe	
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Gly	Gly	Lys	Val	Gln	Arg	Gly	Leu	Ile	Val	Phe	His	Ser	Ser	Glu	Gly	
	415					410					405					
Ser	Thr	Val	Ser	Tyr	Asp	Leu	Phe	Asp	Ala	Gln	Gly	Gln	Tyr	Pro	Asp	
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Thr	Leu	Leu	Arg	Ile	Tyr	Arg	Asp	Asn	Thr	Thr	Ile	Ser	Ser	Thr	Ser	
			445					440					435			
Leu	Ser	Ile	Ser	Leu	Tyr	Leu	Tyr	Thr	Thr	Ser	Ile	Val	Met	Thr	Gln	
				460					455					450		
Thr	Pro	Thr	Ser	Leu	Leu	Val	Ser	Ala	Gly	Asp	Arg	Val	Thr	Ile	Thr	
480					475					470					465	
Cys	Lys	Ala	Ser	Gln	Ser	Val	Ser	Asn	Asp	Val	Ala	Trp	Tyr	Gln	Gln	
	495					490					485					
Lys	Pro	Gly	Gln	Ser	Pro	Lys	Leu	Leu	Ile	Ser	Tyr	Thr	Ser	Ser	Arg	
		510					505					500				
Tyr	Ala	Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Tyr	Gly	Thr	Asp	
			525					520					515			
Phe	Thr	Leu	Thr	Ile	Ser	Ser	Val	Gln	Ala	Glu	Asp	Ala	Ala	Val	Tyr	
				540					535					530		

Phe Cys Gln Gln Asp Tyr Asn Ser Pro Pro Thr Phe Gly Gly Gly Thr
560 555 550 545

Lys Leu Glu Ile Lys Arg Ala Asp Ala Ala Pro Thr Val Ser Ile Phe
575 570 565

Pro Pro Ser Ser Glu Gln Leu Thr Ser Gly Gly Ala Ser Val Val Cys
590 585 580

Phe Leu Asn Asn Phe Tyr Pro Lys Asp Ile Asn Val Lys Trp Lys Ile
605 600 595

Asp Gly Ser Glu Arg Gln Asn Gly Val Leu Asn Ser Trp Thr Asp Gln
620 615 610

Asp Ser Lys Asp Ser Thr Tyr Ser Met Ser Ser Thr Leu Thr Leu Thr
640 635 630 625

Lys Asp Glu Tyr Glu Arg His Asn Ser Tyr Thr Cys Glu Ala Thr His
655 650 645

Lys Thr Ser Thr Ser Pro Ile Val Lys Ser Phe Asn Arg Asn Glu Ser
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Artificial Sequence <213>

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30 25 20

Tyr Met His Trp Val Lys Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile
45 40 35

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

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

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Asn Glu Lys Ala Ile Thr Glu Asn Lys Glu Ser Asp Asp Gln Phe Leu
  45                      40                      35

Glu Asn Thr Leu Leu Phe Lys Gly Phe Phe Thr Gly His Pro Trp Tyr
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Asn Asp Leu Leu Val Asp Leu Gly Ser Lys Asp Ala Thr Asn Lys Tyr
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Lys Gly Lys Lys Val Asp Leu Tyr Gly Ala Tyr Tyr Gly Tyr Gln Cys
  95                      90                      85

Ala Gly Gly Thr Pro Asn Lys Thr Ala Cys Met Tyr Gly Gly Val Thr
 110                      105                      100

Leu His Asp Asn Asn Arg Leu Thr Glu Glu Lys Lys Val Pro Ile Asn
 125                      120                      115

Leu Trp Ile Asp Gly Lys Gln Thr Thr Val Pro Ile Asp Lys Val Lys
 140                      135                      130

Thr Ser Lys Lys Glu Val Thr Val Gln Glu Leu Asp Leu Gln Ala Arg
 160                      155                      150                      145

His Tyr Leu His Gly Lys Phe Gly Leu Tyr Asn Ser Asp Ser Phe Gly
 175                      170                      165

Gly Lys Val Gln Arg Gly Leu Ile Val Phe His Ser Ser Glu Gly Ser
 190                      185                      180

Thr Val Ser Tyr Asp Leu Phe Asp Ala Gln Gly Gln Tyr Pro Asp Thr
 205                      200                      195

Leu Leu Arg Ile Tyr Arg Asp Asn Lys Thr Ile Asn Ser Glu Asn Leu
 220                      215                      210

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His	Ile	Ala	Leu	Tyr	Leu	Tyr	Thr	Thr
			230					225