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Señora

Alix Carmenza Céspedes de Vergel

Jefe de División de Nuevas Creaciones

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

E. _____ S. _____ D. _____

Referencia: Expediente No. 08.099.600

Solicitud de Patente de Invención titulada: "Métodos para reducir la aglomeración de proteína"

Solicitante: Wyeth

MEMORIAL DE ALCANCE

ÁLVARO CORREA ORDÓÑEZ, mayor de edad y vecino de Bogotá D.C., identificado según aparece al pie de mi firma, en mi condición de apoderado de la sociedad en referencia, manifiesto lo siguiente:

El día 19 de septiembre de 2008, bajo el número de radicación 08.099.600, presenté la solicitud de patente de invención de la referencia, para la cual adjunto Listado de Secuencias.

Atentamente,


ÁLVARO CORREA ORDÓÑEZ

C.C.No.79.143.366 de Usaquén

T.P.20.281

Anexo: Listado de Secuencias

BOGLMS/BOGDMS-130186-V1-P2008_000407-.DOC

36119249.txt
Listado de secuencias

<110> WARNE, NICHOLAS WILLIAM
KANTOR, ANGELA
CROWLEY, THOMAS JOSEPH
SOLEY, ERIN CHRISTINE
LI, LI
LUKSHA, NICHOLAS GARY
NEIDHARDT, EDIE ANNA

<120> Métodos para reducir la aglomeración de proteína

<130> 36119.249WO/AM101947

<140> PCT/US2007/006787

<141> 2007-03-19

<150> 60/784,130

<151> 2006-03-20

<160> 7

<170> PatentIn Ver. 3.3

<210> 1

<211> 237

<212> PRT

<213> Secuencia Artificial

<220>

<223> Descripción de la secuencia artificial: Construcción de la cadena sintética ligera.

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

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Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190
Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
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Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
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Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 2
<211> 461
<212> PRT
<213> Secuencia Artificial

<220>
<223> Descripción de la secuencia artificial: construcción de la cadena sintética pesada

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

36119249.txt

Cys Pro Pro Cys Pro Ala Pro Pro Ala Ala Ala Pro Ser Val Phe Leu
245 250 255
Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
260 265 270
Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln
275 280 285
Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
290 295 300
Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu
305 310 315 320
Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
325 330 335
Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
340 345 350
Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
355 360 365
Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
370 375 380
Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
385 390 395 400
Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly
405 410 415
Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
420 425 430
Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
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His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
450 455 460

<210> 3
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<213> Secuencia artificial

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<223> Descripción de la secuencia artificial: Construcción de la cadena
sintética ligera

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35 40 45
Leu Leu Asn Ser Arg Thr Arg Glu Asn Tyr Leu Ala Trp Tyr Gln Gln
50 55 60
Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg

36119249.txt
65 70 75 80
Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
85 90 95
Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr
100 105 110
Tyr Cys Thr Gln Ser Tyr Asn Leu Tyr Thr Phe Gly Gln Gly Thr Lys
115 120 125
Val Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro
130 135 140
Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu
145 150 155 160
Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp
165 170 175
Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp
180 185 190
Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys
195 200 205
Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln
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Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 4
<211> 461
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<213> Secuencia artificial
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<223> Descripción de la secuencia artificial: Construcción de la cadena
sintética pesada.

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

36119249.txt

Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
130						135					140				
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
145					150					155					160
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
				165					170					175	
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
			180					185					190		
Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser
		195					200					205			
Ser	Asn	Phe	Gly	Thr	Gln	Thr	Tyr	Thr	Cys	Asn	Val	Asp	His	Lys	Pro
	210					215					220				
Ser	Asn	Thr	Lys	Val	Asp	Lys	Thr	Val	Glu	Arg	Lys	Cys	Cys	Val	Glu
225					230				235						240
Cys	Pro	Pro	Cys	Pro	Ala	Pro	Pro	Ala	Ala	Ala	Pro	Ser	Val	Phe	Leu
				245					250					255	
Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu
			260					265					270		
Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Gln
		275					280					285			
Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys
	290					295					300				
Pro	Arg	Glu	Glu	Gln	Phe	Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Val	Leu
305					310				315						320
Thr	Val	Val	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys
				325					330					335	
Val	Ser	Asn	Lys	Gly	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys
			340					345					350		
Thr	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser
		355					360					365			
Arg	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys
	370					375					380				
Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln
385					390				395						400
Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Met	Leu	Asp	Ser	Asp	Gly
				405					410					415	
Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln
			420					425					430		
Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn
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7

<213> Secuencia artificial 36119249.txt

<220> Descripción de la secuencia artificial: Construcción de la cadena
<223> sintética pesada

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

141

36119249.txt
 Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
 325 330 335
 Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile
 340 345 350
 Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
 355 360 365
 Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser
 370 375 380
 Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
 385 390 395 400
 Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
 405 410 415
 Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val
 420 425 430
 Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met
 435 440 445
 His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
 450 455 460
 Leu Gly Lys
 465

<210> 6

<211> 239

<212> PRT

<213> Secuencia artificial

<220>

<223> Descripción de la secuencia artificial: Construcción de la cadena sintética Kappa

<400> 6

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

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Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu
145 150 155 160
Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp
165 170 175
Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp
180 185 190
Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys
195 200 205
Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln
210 215 220
Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 7

<211> 1438

<212> PRT

<213> Secuencia artificial

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<223> descripción de la secuencia artificial: Construcción sintética

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

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36119249.txt

195	200	205
His Ser Glu Thr Lys Asn Ser Leu Met	Gln Asp Arg Asp Ala Ala Ser	
210	215	220
Ala Arg Ala Trp Pro Lys Met His Thr	Val Asn Gly Tyr Val Asn Arg	
225	230	240
Ser Leu Pro Gly Leu Ile Gly Cys His	Arg Lys Ser Val Tyr Trp His	
	245	255
Val Ile Gly Met Gly Thr Thr Pro Glu	Val His Ser Ile Phe Leu Glu	
	260	270
Gly His Thr Phe Leu Val Arg Asn His	Arg Gln Ala Ser Leu Glu Ile	
	275	285
Ser Pro Ile Thr Phe Leu Thr Ala Gln	Thr Leu Leu Met Asp Leu Gly	
	290	300
Gln Phe Leu Leu Phe Cys His Ile Ser	Ser His Gln His Asp Gly Met	
305	310	320
Glu Ala Tyr Val Lys Val Asp Ser Cys	Pro Glu Glu Pro Gln Leu Arg	
	325	335
Met Lys Asn Asn Glu Glu Ala Glu Asp	Tyr Asp Asp Asp Leu Thr Asp	
	340	350
Ser Glu Met Asp Val Val Arg Phe Asp	Asp Asp Asn Ser Pro Ser Phe	
	355	365
Ile Gln Ile Arg Ser Val Ala Lys Lys	His Pro Lys Thr Trp Val His	
	370	380
Tyr Ile Ala Ala Glu Glu Glu Asp Trp	Asp Tyr Ala Pro Leu Val Leu	
385	390	400
Ala Pro Asp Asp Arg Ser Tyr Lys Ser	Gln Tyr Leu Asn Asn Gly Pro	
	405	415
Gln Arg Ile Gly Arg Lys Tyr Lys Lys	Val Arg Phe Met Ala Tyr Thr	
	420	430
Asp Glu Thr Phe Lys Thr Arg Glu Ala	Ile Gln His Glu Ser Gly Ile	
	435	445
Leu Gly Pro Leu Leu Tyr Gly Glu Val	Gly Asp Thr Leu Leu Ile Ile	
	450	460
Phe Lys Asn Gln Ala Ser Arg Pro Tyr	Asn Ile Tyr Pro His Gly Ile	
465	470	480
Thr Asp Val Arg Pro Leu Tyr Ser Arg	Arg Leu Pro Lys Gly Val Lys	
	485	495
His Leu Lys Asp Phe Pro Ile Leu Pro	Gly Glu Ile Phe Lys Tyr Lys	
	500	510
Trp Thr Val Thr Val Glu Asp Gly Pro	Thr Lys Ser Asp Pro Arg Cys	
	515	525
Leu Thr Arg Tyr Tyr Ser Ser Phe Val	Asn Met Glu Arg Asp Leu Ala	
	530	540
Ser Gly Leu Ile Gly Pro Leu Leu Ile	Cys Tyr Lys Glu Ser Val Asp	
545	550	560

36119249.txt

Gln Arg Gly Asn Gln Ile Met Ser Asp Lys Arg Asn Val Ile Leu Phe
565 570 575
Ser Val Phe Asp Glu Asn Arg Ser Trp Tyr Leu Thr Glu Asn Ile Gln
580 585 590
Arg Phe Leu Pro Asn Pro Ala Gly Val Gln Leu Glu Asp Pro Glu Phe
595 600 605
Gln Ala Ser Asn Ile Met His Ser Ile Asn Gly Tyr Val Phe Asp Ser
610 615 620
Leu Gln Leu Ser Val Cys Leu His Glu Val Ala Tyr Trp Tyr Ile Leu
625 630 635 640
Ser Ile Gly Ala Gln Thr Asp Phe Leu Ser Val Phe Phe Ser Gly Tyr
645 650 655
Thr Phe Lys His Lys Met Val Tyr Glu Asp Thr Leu Thr Leu Phe Pro
660 665 670
Phe Ser Gly Glu Thr Val Phe Met Ser Met Glu Asn Pro Gly Leu Trp
675 680 685
Ile Leu Gly Cys His Asn Ser Asp Phe Arg Asn Arg Gly Met Thr Ala
690 695 700
Leu Leu Lys Val Ser Ser Cys Asp Lys Asn Thr Gly Asp Tyr Tyr Glu
705 710 715 720
Asp Ser Tyr Glu Asp Ile Ser Ala Tyr Leu Leu Ser Lys Asn Asn Ala
725 730 735
Ile Glu Pro Arg Ser Phe Ser Gln Asn Pro Pro Val Leu Lys Arg His
740 745 750
Gln Arg Glu Ile Thr Arg Thr Thr Leu Gln Ser Asp Gln Glu Glu Ile
755 760 765
Asp Tyr Asp Asp Thr Ile Ser Val Glu Met Lys Lys Glu Asp Phe Asp
770 775 780
Ile Tyr Asp Glu Asp Glu Asn Gln Ser Pro Arg Ser Phe Gln Lys Lys
785 790 795 800
Thr Arg His Tyr Phe Ile Ala Ala Val Glu Arg Leu Trp Asp Tyr Gly
805 810 815
Met Ser Ser Ser Pro His Val Leu Arg Asn Arg Ala Gln Ser Gly Ser
820 825 830
Val Pro Gln Phe Lys Lys Val Val Phe Gln Glu Phe Thr Asp Gly Ser
835 840 845
Phe Thr Gln Pro Leu Tyr Arg Gly Glu Leu Asn Glu His Leu Gly Leu
850 855 860
Leu Gly Pro Tyr Ile Arg Ala Glu Val Glu Asp Asn Ile Met Val Thr
865 870 875 880
Phe Arg Asn Gln Ala Ser Arg Pro Tyr Ser Phe Tyr Ser Ser Leu Ile
885 890 895
Ser Tyr Glu Glu Asp Gln Arg Gln Gly Ala Glu Pro Arg Lys Asn Phe
900 905 910

36119249.txt

Val Lys Pro Asn Glu Thr Lys Thr Tyr 915 920	Phe Trp Lys Val Gln His His 925
Met Ala Pro Thr Lys Asp Glu Phe Asp 930 935	Cys Lys Ala Trp Ala Tyr Phe 940
Ser Asp Val Asp Leu Glu Lys Asp Val 945 950	His Ser Gly Leu Ile Gly Pro 955 960
Leu Leu Val Cys His Thr Asn Thr Leu 965	Asn Pro Ala His Gly Arg Gln 970 975
Val Thr Val Gln Glu Phe Ala Leu Phe 980 985	Leu Thr Ile Phe Asp Glu Thr 990
Lys Ser Trp Tyr Phe Thr Glu Asn Met 995 1000	Glu Arg Asn Cys Arg Ala Pro 1005
Cys Asn Ile Gln Met Glu Asp Pro Thr 1010 1015	Phe Lys Glu Asn Tyr Arg Phe 1020
His Ala Ile Asn Gly Tyr Ile Met Asp 1025 1030	Thr Leu Pro Gly Leu Val Met 1035 1040
Ala Gln Asp Gln Arg Ile Arg Trp Tyr 1045	Leu Leu Ser Met Gly Ser Asn 1050 1055
Glu Asn Ile His Ser Ile His Phe Ser 1060 1065	Gly His Val Phe Thr Val Arg 1070
Lys Lys Glu Glu Tyr Lys Met Ala Leu 1075 1080	Tyr Asn Leu Tyr Pro Gly Val 1085
Phe Glu Thr Val Glu Met Leu Pro Ser 1090 1095	Lys Ala Gly Ile Trp Arg Val 1100
Glu Cys Leu Ile Gly Glu His Leu His 1105 1110	Ala Gly Met Ser Thr Leu Phe 1115 1120
Leu Val Tyr Ser Asn Lys Cys Gln Thr 1125	Pro Leu Gly Met Ala Ser Gly 1130 1135
His Ile Arg Asp Phe Gln Ile Thr Ala 1140 1145	Ser Gly Gln Tyr Gly Gln Trp 1150
Ala Pro Lys Leu Ala Arg Leu His Tyr 1155 1160	Ser Gly Ser Ile Asn Ala Trp 1165
Ser Thr Lys Glu Pro Phe Ser Trp Ile 1170 1175	Lys Val Asp Leu Leu Ala Pro 1180
Met Ile Ile His Gly Ile Lys Thr Gln 1185 1190	Gly Ala Arg Gln Lys Phe Ser 1195 1200
Ser Leu Tyr Ile Ser Gln Phe Ile Ile 1205	Met Tyr Ser Leu Asp Gly Lys 1210 1215
Lys Trp Gln Thr Tyr Arg Gly Asn Ser 1220 1225	Thr Gly Thr Leu Met Val Phe 1230
Phe Gly Asn Val Asp Ser Ser Gly Ile 1235 1240	Lys His Asn Ile Phe Asn Pro 1245
Pro Ile Ile Ala Arg Tyr Ile Arg Leu 1250 1255	His Pro Thr His Tyr Ser Ile 1260
Arg Ser Thr Leu Arg Met Glu Leu Met	Gly Cys Asp Leu Asn Ser Cys

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1265 1270 36119249.txt 1275 1280
 Ser Met Pro Leu Gly Met Glu Ser Lys Ala Ile Ser Asp Ala Gln Ile
 1285 1290 1295
 Thr Ala Ser Ser Tyr Phe Thr Asn Met Phe Ala Thr Trp Ser Pro Ser
 1300 1305 1310
 Lys Ala Arg Leu His Leu Gln Gly Arg Ser Asn Ala Trp Arg Pro Gln
 1315 1320 1325
 Val Asn Asn Pro Lys Glu Trp Leu Gln Val Asp Phe Gln Lys Thr Met
 1330 1335 1340
 Lys Val Thr Gly Val Thr Thr Gln Gly Val Lys Ser Leu Leu Thr Ser
 1345 1350 1355 1360
 Met Tyr Val Lys Glu Phe Leu Ile Ser Ser Ser Gln Asp Gly His Gln
 1365 1370 1375
 Trp Thr Leu Phe Phe Gln Asn Gly Lys Val Lys Val Phe Gln Gly Asn
 1380 1385 1390
 Gln Asp Ser Phe Thr Pro Val Val Asn Ser Leu Asp Pro Pro Leu Leu
 1395 1400 1405
 Thr Arg Tyr Leu Arg Ile His Pro Gln Ser Trp Val His Gln Ile Ala
 1410 1415 1420
 Leu Arg Met Glu Val Leu Gly Cys Glu Ala Gln Asp Leu Tyr
 1425 1430 1435