

761342000140SEQLIST

SEQUENCE LISTING

<110> Krystal Biotech, LLC
KRISHNAN, Suma
AGARWAL, Pooja

<120> COMPOSITIONS AND METHODS FOR THE
TREATMENT OF WOUNDS, DISORDERS, AND DISEASES OF THE SKIN

<130> 761342000140

<140> Not Yet Assigned

<141> 2016-12-28

<150> US 62/320,316

<151> 2016-04-08

<160> 30

<170> FastSEQ for Windows Version 4.0

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<212> DNA

<213> Homo sapiens

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	805	810	815												
Met Arg His Gln Ile Leu Pro Gly Asn Thr Asp Ser Ala Glu Ile Arg															
	820	825	830												
Gly Leu Glu Gly Gly Val Ser Tyr Ser Val Arg Val Thr Ala Leu Val															

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835	840	845
Gly Asp Arg Glu Gly Thr Pro Val Ser Ile Val Val Thr Thr Pro Pro		
850	855	860
Glu Ala Pro Pro Ala Leu Gly Thr Leu His Val Val Gln Arg Gly Glu		
865	870	875
His Ser Leu Arg Leu Arg Trp Glu Pro Val Pro Arg Ala Gln Gly Phe		
885	890	895
Leu Leu His Trp Gln Pro Glu Gly Gly Gln Glu Gln Ser Arg Val Leu		
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Gly Pro Glu Leu Ser Ser Tyr His Leu Asp Gly Leu Glu Pro Ala Thr		
915	920	925
Gln Tyr Arg Val Arg Leu Ser Val Leu Gly Pro Ala Gly Glu Gly Pro		
930	935	940
Ser Ala Glu Val Thr Ala Arg Thr Glu Ser Pro Arg Val Pro Ser Ile		
945	950	955
Glu Leu Arg Val Val Asp Thr Ser Ile Asp Ser Val Thr Leu Ala Trp		
965	970	975
Thr Pro Val Ser Arg Ala Ser Ser Tyr Ile Leu Ser Trp Arg Pro Leu		
980	985	990
Arg Gly Pro Gly Gln Glu Val Pro Gly Ser Pro Gln Thr Leu Pro Gly		
995	1000	1005
Ile Ser Ser Ser Gln Arg Val Thr Gly Leu Glu Pro Gly Val Ser Tyr		
1010	1015	1020
Ile Phe Ser Leu Thr Pro Val Leu Asp Gly Val Arg Gly Pro Glu Ala		
1025	1030	1035
Ser Val Thr Gln Thr Pro Val Cys Pro Arg Gly Leu Ala Asp Val Val		
1045	1050	1055
Phe Leu Pro His Ala Thr Gln Asp Asn Ala His Arg Ala Glu Ala Thr		
1060	1065	1070
Arg Arg Val Leu Glu Arg Leu Val Leu Ala Leu Gly Pro Leu Gly Pro		
1075	1080	1085
Gln Ala Val Gln Val Gly Leu Leu Ser Tyr Ser His Arg Pro Ser Pro		
1090	1095	1100
Leu Phe Pro Leu Asn Gly Ser His Asp Leu Gly Ile Ile Leu Gln Arg		
1105	1110	1115
Ile Arg Asp Met Pro Tyr Met Asp Pro Ser Gly Asn Asn Leu Gly Thr		
1125	1130	1135
Ala Val Val Thr Ala His Arg Tyr Met Leu Ala Pro Asp Ala Pro Gly		
1140	1145	1150
Arg Arg Gln His Val Pro Gly Val Met Val Leu Leu Val Asp Glu Pro		
1155	1160	1165
Leu Arg Gly Asp Ile Phe Ser Pro Ile Arg Glu Ala Gln Ala Ser Gly		
1170	1175	1180
Leu Asn Val Val Met Leu Gly Met Ala Gly Ala Asp Pro Glu Gln Leu		
1185	1190	1195
Arg Arg Leu Ala Pro Gly Met Asp Ser Val Gln Thr Phe Phe Ala Val		
1205	1210	1215
Asp Asp Gly Pro Ser Leu Asp Gln Ala Val Ser Gly Leu Ala Thr Ala		

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1220	1225	1230
Leu Cys Gln Ala Ser Phe Thr Thr Gln Pro Arg Pro Glu Pro Cys Pro		
1235	1240	1245
Val Tyr Cys Pro Lys Gly Gln Lys Gly Glu Pro Gly Glu Met Gly Leu		
1250	1255	1260
Arg Gly Gln Val Gly Pro Pro Gly Asp Pro Gly Leu Pro Gly Arg Thr		
1265	1270	1275
Gly Ala Pro Gly Pro Gln Gly Pro Pro Gly Ser Ala Thr Ala Lys Gly		1280
1285	1290	1295
Glu Arg Gly Phe Pro Gly Ala Asp Gly Arg Pro Gly Ser Pro Gly Arg		
1300	1305	1310
Ala Gly Asn Pro Gly Thr Pro Gly Ala Pro Gly Leu Lys Gly Ser Pro		
1315	1320	1325
Gly Leu Pro Gly Pro Arg Gly Asp Pro Gly Glu Arg Gly Pro Arg Gly		
1330	1335	1340
Pro Lys Gly Glu Pro Gly Ala Pro Gly Gln Val Ile Gly Gly Glu Gly		
1345	1350	1355
Pro Gly Leu Pro Gly Arg Lys Gly Asp Pro Gly Pro Ser Gly Pro Pro		
1365	1370	1375
Gly Pro Arg Gly Pro Leu Gly Asp Pro Gly Pro Arg Gly Pro Pro Gly		
1380	1385	1390
Leu Pro Gly Thr Ala Met Lys Gly Asp Lys Gly Asp Arg Gly Glu Arg		
1395	1400	1405
Gly Pro Pro Gly Pro Gly Glu Gly Gly Ile Ala Pro Gly Glu Pro Gly		
1410	1415	1420
Leu Pro Gly Leu Pro Gly Ser Pro Gly Pro Gln Gly Pro Val Gly Pro		
1425	1430	1435
Pro Gly Lys Lys Gly Glu Lys Gly Asp Ser Glu Asp Gly Ala Pro Gly		
1445	1450	1455
Leu Pro Gly Gln Pro Gly Ser Pro Gly Glu Gln Gly Pro Arg Gly Pro		
1460	1465	1470
Pro Gly Ala Ile Gly Pro Lys Gly Asp Arg Gly Phe Pro Gly Pro Leu		
1475	1480	1485
Gly Glu Ala Gly Glu Lys Gly Glu Arg Gly Pro Pro Gly Pro Ala Gly		
1490	1495	1500
Ser Arg Gly Leu Pro Gly Val Ala Gly Arg Pro Gly Ala Lys Gly Pro		
1505	1510	1515
Glu Gly Pro Pro Gly Pro Thr Gly Arg Gln Gly Glu Lys Gly Glu Pro		
1525	1530	1535
Gly Arg Pro Gly Asp Pro Ala Val Val Gly Pro Ala Val Ala Gly Pro		
1540	1545	1550
Lys Gly Glu Lys Gly Asp Val Gly Pro Ala Gly Pro Arg Gly Ala Thr		
1555	1560	1565
Gly Val Gln Gly Glu Arg Gly Pro Pro Gly Leu Val Leu Pro Gly Asp		
1570	1575	1580
Pro Gly Pro Lys Gly Asp Pro Gly Asp Arg Gly Pro Ile Gly Leu Thr		
1585	1590	1595
Gly Arg Ala Gly Pro Pro Gly Asp Ser Gly Pro Pro Gly Glu Lys Gly		1600

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Asp Pro Gly Arg Pro Gly Pro Pro Gly Pro Val Gly Pro Arg Gly Arg					
	1620		1625		1630
Asp Gly Glu Val Gly Glu Lys Gly Asp Glu Gly Pro Pro Gly Asp Pro					
	1635		1640		1645
Gly Leu Pro Gly Lys Ala Gly Glu Arg Gly Leu Arg Gly Ala Pro Gly					
	1650		1655		1660
Val Arg Gly Pro Val Gly Glu Lys Gly Asp Gln Gly Asp Pro Gly Glu					
1665	1670		1675		1680
Asp Gly Arg Asn Gly Ser Pro Gly Ser Ser Gly Pro Lys Gly Asp Arg					
	1685		1690		1695
Gly Glu Pro Gly Pro Pro Gly Pro Pro Gly Arg Leu Val Asp Thr Gly					
	1700		1705		1710
Pro Gly Ala Arg Glu Lys Gly Glu Pro Gly Asp Arg Gly Gln Glu Gly					
	1715		1720		1725
Pro Arg Gly Pro Lys Gly Asp Pro Gly Leu Pro Gly Ala Pro Gly Glu					
	1730		1735		1740
Arg Gly Ile Glu Gly Phe Arg Gly Pro Pro Gly Pro Gln Gly Asp Pro					
1745	1750		1755		1760
Gly Val Arg Gly Pro Ala Gly Glu Lys Gly Asp Arg Gly Pro Pro Gly					
	1765		1770		1775
Leu Asp Gly Arg Ser Gly Leu Asp Gly Lys Pro Gly Ala Ala Gly Pro					
	1780		1785		1790
Ser Gly Pro Asn Gly Ala Ala Gly Lys Ala Gly Asp Pro Gly Arg Asp					
	1795		1800		1805
Gly Leu Pro Gly Leu Arg Gly Glu Gln Gly Leu Pro Gly Pro Ser Gly					
	1810		1815		1820
Pro Pro Gly Leu Pro Gly Lys Pro Gly Glu Asp Gly Lys Pro Gly Leu					
1825	1830		1835		1840
Asn Gly Lys Asn Gly Glu Pro Gly Asp Pro Gly Glu Asp Gly Arg Lys					
	1845		1850		1855
Gly Glu Lys Gly Asp Ser Gly Ala Ser Gly Arg Glu Gly Arg Asp Gly					
	1860		1865		1870
Pro Lys Gly Glu Arg Gly Ala Pro Gly Ile Leu Gly Pro Gln Gly Pro					
	1875		1880		1885
Pro Gly Leu Pro Gly Pro Val Gly Pro Pro Gly Gln Gly Phe Pro Gly					
	1890		1895		1900
Val Pro Gly Gly Thr Gly Pro Lys Gly Asp Arg Gly Glu Thr Gly Ser					
1905	1910		1915		1920
Lys Gly Glu Gln Gly Leu Pro Gly Glu Arg Gly Leu Arg Gly Glu Pro					
	1925		1930		1935
Gly Ser Val Pro Asn Val Asp Arg Leu Leu Glu Thr Ala Gly Ile Lys					
	1940		1945		1950
Ala Ser Ala Leu Arg Glu Ile Val Glu Thr Trp Asp Glu Ser Ser Gly					
	1955		1960		1965
Ser Phe Leu Pro Val Pro Glu Arg Arg Arg Gly Pro Lys Gly Asp Ser					
	1970		1975		1980
Gly Glu Gln Gly Pro Pro Gly Lys Glu Gly Pro Ile Gly Phe Pro Gly					

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Glu Arg Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Pro Gln Gly Pro						
	2005			2010		2015
Pro Gly Leu Ala Leu Gly Glu Arg Gly Pro Pro Gly Pro Ser Gly Leu						
	2020			2025		2030
Ala Gly Glu Pro Gly Lys Pro Gly Ile Pro Gly Leu Pro Gly Arg Ala						
	2035			2040		2045
Gly Gly Val Gly Glu Ala Gly Arg Pro Gly Glu Arg Gly Glu Arg Gly						
	2050			2055		2060
Glu Lys Gly Glu Arg Gly Glu Gln Gly Arg Asp Gly Pro Pro Gly Leu						
	2065			2070		2075
Pro Gly Thr Pro Gly Pro Pro Gly Pro Pro Gly Pro Lys Val Ser Val						
	2085			2090		2095
Asp Glu Pro Gly Pro Gly Leu Ser Gly Glu Gln Gly Pro Pro Gly Leu						
	2100			2105		2110
Lys Gly Ala Lys Gly Glu Pro Gly Ser Asn Gly Asp Gln Gly Pro Lys						
	2115			2120		2125
Gly Asp Arg Gly Val Pro Gly Ile Lys Gly Asp Arg Gly Glu Pro Gly						
	2130			2135		2140
Pro Arg Gly Gln Asp Gly Asn Pro Gly Leu Pro Gly Glu Arg Gly Met						
	2145			2150		2155
Ala Gly Pro Glu Gly Lys Pro Gly Leu Gln Gly Pro Arg Gly Pro Pro						
	2165			2170		2175
Gly Pro Val Gly Gly His Gly Asp Pro Gly Pro Pro Gly Ala Pro Gly						
	2180			2185		2190
Leu Ala Gly Pro Ala Gly Pro Gln Gly Pro Ser Gly Leu Lys Gly Glu						
	2195			2200		2205
Pro Gly Glu Thr Gly Pro Pro Gly Arg Gly Leu Thr Gly Pro Thr Gly						
	2210			2215		2220
Ala Val Gly Leu Pro Gly Pro Pro Gly Pro Ser Gly Leu Val Gly Pro						
	2225			2230		2235
Gln Gly Ser Pro Gly Leu Pro Gly Gln Val Gly Glu Thr Gly Lys Pro						
	2245			2250		2255
Gly Ala Pro Gly Arg Asp Gly Ala Ser Gly Lys Asp Gly Asp Arg Gly						
	2260			2265		2270
Ser Pro Gly Val Pro Gly Ser Pro Gly Leu Pro Gly Pro Val Gly Pro						
	2275			2280		2285
Lys Gly Glu Pro Gly Pro Thr Gly Ala Pro Gly Gln Ala Val Val Gly						
	2290			2295		2300
Leu Pro Gly Ala Lys Gly Glu Lys Gly Ala Pro Gly Gly Leu Ala Gly						
	2305			2310		2315
Asp Leu Val Gly Glu Pro Gly Ala Lys Gly Asp Arg Gly Leu Pro Gly						
	2325			2330		2335
Pro Arg Gly Glu Lys Gly Glu Ala Gly Arg Ala Gly Glu Pro Gly Asp						
	2340			2345		2350
Pro Gly Glu Asp Gly Gln Lys Gly Ala Pro Gly Pro Lys Gly Phe Lys						
	2355			2360		2365
Gly Asp Pro Gly Val Gly Val Pro Gly Ser Pro Gly Pro Pro Gly Pro						

761342000140SEQLIST

2370	2375	2380
Pro Gly Val Lys Gly Asp Leu Gly Leu Pro Gly Leu Pro Gly Ala Pro		
2385	2390	2395
Gly Val Val Gly Phe Pro Gly Gln Thr Gly Pro Arg Gly Glu Met Gly		2400
	2405	2410
Gln Pro Gly Pro Ser Gly Glu Arg Gly Leu Ala Gly Pro Pro Gly Arg		2415
	2420	2425
Glu Gly Ile Pro Gly Pro Leu Gly Pro Pro Gly Pro Pro Gly Ser Val		2430
	2435	2440
Gly Pro Pro Gly Ala Ser Gly Leu Lys Gly Asp Lys Gly Asp Pro Gly		2445
	2450	2455
Val Gly Leu Pro Gly Pro Arg Gly Glu Arg Gly Glu Pro Gly Ile Arg		2460
2465	2470	2475
Gly Glu Asp Gly Arg Pro Gly Gln Glu Gly Pro Arg Gly Leu Thr Gly		2480
	2485	2490
Pro Pro Gly Ser Arg Gly Glu Arg Gly Glu Lys Gly Asp Val Gly Ser		2495
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Ala Gly Leu Lys Gly Asp Lys Gly Asp Ser Ala Val Ile Leu Gly Pro		2510
	2515	2520
Pro Gly Pro Arg Gly Ala Lys Gly Asp Met Gly Glu Arg Gly Pro Arg		2525
	2530	2535
Gly Leu Asp Gly Asp Lys Gly Pro Arg Gly Asp Asn Gly Asp Pro Gly		2540
2545	2550	2555
Asp Lys Gly Ser Lys Gly Glu Pro Gly Asp Lys Gly Ser Ala Gly Leu		2560
	2565	2570
Pro Gly Leu Arg Gly Leu Leu Gly Pro Gln Gly Gln Pro Gly Ala Ala		2575
	2580	2585
Gly Ile Pro Gly Asp Pro Gly Ser Pro Gly Lys Asp Gly Val Pro Gly		2590
	2595	2600
Ile Arg Gly Glu Lys Gly Asp Val Gly Phe Met Gly Pro Arg Gly Leu		2605
	2610	2615
Lys Gly Glu Arg Gly Val Lys Gly Ala Cys Gly Leu Asp Gly Glu Lys		2620
2625	2630	2635
Gly Asp Lys Gly Glu Ala Gly Pro Pro Gly Arg Pro Gly Leu Ala Gly		2640
	2645	2650
His Lys Gly Glu Met Gly Glu Pro Gly Val Pro Gly Gln Ser Gly Ala		2655
	2660	2665
Pro Gly Lys Glu Gly Leu Ile Gly Pro Lys Gly Asp Arg Gly Phe Asp		2670
	2675	2680
Gly Gln Pro Gly Pro Lys Gly Asp Gln Gly Glu Lys Gly Glu Arg Gly		2685
	2690	2695
Thr Pro Gly Ile Gly Gly Phe Pro Gly Pro Ser Gly Asn Asp Gly Ser		2700
2705	2710	2715
Ala Gly Pro Pro Gly Pro Pro Gly Ser Val Gly Pro Arg Gly Pro Glu		2720
	2725	2730
Gly Leu Gln Gly Gln Lys Gly Glu Arg Gly Pro Pro Gly Glu Arg Val		2735
	2740	2745
Val Gly Ala Pro Gly Val Pro Gly Ala Pro Gly Glu Arg Gly Glu Gln		2750

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2755	2760	2765
Gly Arg Pro Gly Pro Ala Gly Pro Arg Gly Glu Lys Gly Glu Ala Ala		
2770	2775	2780
Leu Thr Glu Asp Asp Ile Arg Gly Phe Val Arg Gln Glu Met Ser Gln		
2785	2790	2795
His Cys Ala Cys Gln Gly Gln Phe Ile Ala Ser Gly Ser Arg Pro Leu		
2805	2810	2815
Pro Ser Tyr Ala Ala Asp Thr Ala Gly Ser Gln Leu His Ala Val Pro		
2820	2825	2830
Val Leu Arg Val Ser His Ala Glu Glu Glu Glu Arg Val Pro Pro Glu		
2835	2840	2845
Asp Asp Glu Tyr Ser Glu Tyr Ser Glu Tyr Ser Val Glu Glu Tyr Gln		
2850	2855	2860
Asp Pro Glu Ala Pro Trp Asp Ser Asp Asp Pro Cys Ser Leu Pro Leu		
2865	2870	2875
Asp Glu Gly Ser Cys Thr Ala Tyr Thr Leu Arg Trp Tyr His Arg Ala		
2885	2890	2895
Val Thr Gly Ser Thr Glu Ala Cys His Pro Phe Val Tyr Gly Gly Cys		
2900	2905	2910
Gly Gly Asn Ala Asn Arg Phe Gly Thr Arg Glu Ala Cys Glu Arg Arg		
2915	2920	2925
Cys Pro Pro Arg Val Val Gln Ser Gln Gly Thr Gly Thr Ala Gln Asp		
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<211> 2217

<212> DNA

<213> Homo sapiens

<400> 3

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761342000140SEQLIST

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<211> 738

<212> PRT

<213> Homo sapiens

<400> 4

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

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761342000140SEQLIST

				165				170					175		
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Leu	Phe	Tyr	Thr	Arg	Leu	Tyr	Leu	Asp	Pro	Gly	Leu	Arg	Glu	Lys	Leu
		195					200					205			
Ser	Leu	Asn	Leu	Asp	His	Lys	Ser	Arg	Ile	Phe	Gln	Asn	Leu	Asn	Gly
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Ala	Leu	Asp	Glu	Val	Val	Leu	Lys	Phe	Asp	Arg	Asn	Arg	Val	Arg	Ile
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Arg	Asn	Val	Ala	Tyr	Asp	Thr	Leu	Pro	Ile	Val	Val	His	Gly	Asn	Gly
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Pro	Thr	Lys	Leu	Gln	Leu	Asn	Tyr	Leu	Gly	Asn	Tyr	Val	Pro	Asn	Gly
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Trp	Thr	Pro	Glu	Gly	Gly	Cys	Gly	Phe	Cys	Asn	Gln	Asp	Arg	Arg	Thr
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Leu	Pro	Gly	Gly	Gln	Pro	Pro	Pro	Arg	Val	Phe	Leu	Ala	Val	Phe	Val
	290					295					300				
Glu	Gln	Pro	Thr	Pro	Phe	Leu	Pro	Arg	Phe	Leu	Gln	Arg	Leu	Leu	Leu
305					310					315					320
Leu	Asp	Tyr	Pro	Pro	Asp	Arg	Val	Thr	Leu	Phe	Leu	His	Asn	Asn	Glu
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Val	Phe	His	Glu	Pro	His	Ile	Ala	Asp	Ser	Trp	Pro	Gln	Leu	Gln	Asp
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His	Phe	Ser	Ala	Val	Lys	Leu	Val	Gly	Pro	Glu	Glu	Ala	Leu	Ser	Pro
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Gly	Glu	Ala	Arg	Asp	Met	Ala	Met	Asp	Leu	Cys	Arg	Gln	Asp	Pro	Glu
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Cys	Glu	Phe	Tyr	Phe	Ser	Leu	Asp	Ala	Asp	Ala	Val	Leu	Thr	Asn	Leu
385					390					395					400
Gln	Thr	Leu	Arg	Ile	Leu	Ile	Glu	Glu	Asn	Arg	Lys	Val	Ile	Ala	Pro
				405					410					415	
Met	Leu	Ser	Arg	His	Gly	Lys	Leu	Trp	Ser	Asn	Phe	Trp	Gly	Ala	Leu
			420					425					430		
Ser	Pro	Asp	Glu	Tyr	Tyr	Ala	Arg	Ser	Glu	Asp	Tyr	Val	Glu	Leu	Val
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Gln	Arg	Lys	Arg	Val	Gly	Val	Trp	Asn	Val	Pro	Tyr	Ile	Ser	Gln	Ala
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Tyr	Val	Ile	Arg	Gly	Asp	Thr	Leu	Arg	Met	Glu	Leu	Pro	Gln	Arg	Asp
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Val	Phe	Ser	Gly	Ser	Asp	Thr	Asp	Pro	Asp	Met	Ala	Phe	Cys	Lys	Ser
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Phe	Arg	Asp	Lys	Gly	Ile	Phe	Leu	His	Leu	Ser	Asn	Gln	His	Glu	Phe
			500					505					510		
Gly	Arg	Leu	Leu	Ala	Thr	Ser	Arg	Tyr	Asp	Thr	Glu	His	Leu	His	Pro
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Asp	Leu	Trp	Gln	Ile	Phe	Asp	Asn	Pro	Val	Asp	Trp	Lys	Glu	Gln	Tyr
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Ile	His	Glu	Asn	Tyr	Ser	Arg	Ala	Leu	Glu	Gly	Glu	Gly	Ile	Val	Glu

761342000140SEQLIST

545		550		555		560									
Gln	Pro	Cys	Pro	Asp	Val	Tyr	Trp	Phe	Pro	Leu	Leu	Ser	Glu	Gln	Met
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Cys	Asp	Glu	Leu	Val	Ala	Glu	Met	Glu	His	Tyr	Gly	Gln	Trp	Ser	Gly
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Gly	Arg	His	Glu	Asp	Ser	Arg	Leu	Ala	Gly	Gly	Tyr	Glu	Asn	Val	Pro
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Thr	Val	Asp	Ile	His	Met	Lys	Gln	Val	Gly	Tyr	Glu	Asp	Gln	Trp	Leu
	610			615		620									
Gln	Leu	Leu	Arg	Thr	Tyr	Val	Gly	Pro	Met	Thr	Glu	Ser	Leu	Phe	Pro
	625			630		635									
Gly	Tyr	His	Thr	Lys	Ala	Arg	Ala	Val	Met	Asn	Phe	Val	Val	Arg	Tyr
		645		650		655									
Arg	Pro	Asp	Glu	Gln	Pro	Ser	Leu	Arg	Pro	His	His	Asp	Ser	Ser	Thr
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Phe	Thr	Leu	Asn	Val	Ala	Leu	Asn	His	Lys	Gly	Leu	Asp	Tyr	Glu	Gly
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Gly	Gly	Cys	Arg	Phe	Leu	Arg	Tyr	Asp	Cys	Val	Ile	Ser	Ser	Pro	Arg
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Lys	Gly	Trp	Ala	Leu	Leu	His	Pro	Gly	Arg	Leu	Thr	His	Tyr	His	Glu
	705			710		715									
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Asp Pro

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

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Ala 355	Thr	Gly	Tyr	Arg	Val	Thr	Trp	Arg	Val	Leu	Ser	Gly 365	Gly	Pro	Thr
Gln 370	Gln	Gln	Glu	Leu	Gly	Pro	Gly	Gln	Gly	Ser	Val	Leu	Leu	Arg	Asp
Leu 385	Glu	Pro	Gly	Thr	Asp	Tyr	Glu	Val	Thr	Val	Ser	Thr	Leu	Phe	Gly 400
Arg	Ser	Val	Gly	Pro	Ala	Thr	Ser	Leu	Met	Ala	Arg	Thr	Asp	Ala	Ser
Val	Glu	Gln	Thr	Leu	Arg	Pro	Val	Ile	Leu	Gly	Pro	Thr	Ser	Ile	Leu
Leu	Ser	Trp	Asn	Leu	Val	Pro	Glu	Ala	Arg	Gly	Tyr	Arg	Leu	Glu	Trp
Arg	Arg	Glu	Thr	Gly	Leu	Glu	Pro	Pro	Gln	Lys	Val	Val	Leu	Pro	Ser
Asp 465	Val	Thr	Arg	Tyr	Gln	Leu	Asp	Gly	Leu	Gln	Pro	Gly	Thr	Glu	Tyr 480
Arg	Leu	Thr	Leu	Tyr	Thr	Leu	Leu	Glu	Gly	His	Glu	Val	Ala	Thr	Pro
Ala	Thr	Val	Val	Pro	Thr	Gly	Pro	Glu	Leu	Pro	Val	Ser	Pro	Val	Thr
Asp	Leu	Gln	Ala	Thr	Glu	Leu	Pro	Gly	Gln	Arg	Val	Arg	Val	Ser	Trp
Ser	Pro	Val	Pro	Gly	Ala	Thr	Gln	Tyr	Arg	Ile	Ile	Val	Arg	Ser	Thr
Gln 545	Gly	Val	Glu	Arg	Thr	Leu	Val	Leu	Pro	Gly	Ser	Gln	Thr	Ala	Phe 560
Asp	Leu	Asp	Asp	Val	Gln	Ala	Gly	Leu	Ser	Tyr	Thr	Val	Arg	Val	Ser
Ala	Arg	Val	Gly	Pro	Arg	Glu	Gly	Ser	Ala	Ser	Val	Leu	Thr	Val	Arg
Arg	Glu	Pro	Glu	Thr	Pro	Leu	Ala	Val	Pro	Gly	Leu	Arg	Val	Val	Val
Ser	Asp	Ala	Thr	Arg	Val	Arg	Val	Ala	Trp	Gly	Pro	Val	Pro	Gly	Ala
Ser 625	Gly	Phe	Arg	Ile	Ser	Trp	Ser	Thr	Gly	Ser	Gly	Pro	Glu	Ser	Ser 640
Gln	Thr	Leu	Pro	Pro	Asp	Ser	Thr	Ala	Thr	Asp	Ile	Thr	Gly	Leu	Gln
Pro	Gly	Thr	Thr	Tyr	Gln	Val	Ala	Val	Ser	Val	Leu	Arg	Gly	Arg	Glu
Glu	Gly	Pro	Ala	Ala	Val	Ile	Val	Ala	Arg	Thr	Asp	Pro	Leu	Gly	Pro
Val	Arg	Thr	Val	His	Val	Thr	Gln	Ala	Ser	Ser	Ser	Ser	Val	Thr	Ile
Thr 705	Trp	Thr	Arg	Val	Pro	Gly	Ala	Thr	Gly	Tyr	Arg	Val	Ser	Trp	His 720
Ser	Ala	His	Gly	Pro	Glu	Lys	Ser	Gln	Leu	Val	Ser	Gly	Glu	Ala	Thr

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Val	Ala	Glu	Leu	Asp	Gly	Leu	Glu	Pro	Asp	Thr	Glu	Tyr	Thr	Val	His
			740					745					750		
Val	Arg	Ala	His	Val	Ala	Gly	Val	Asp	Gly	Pro	Pro	Ala	Ser	Val	Val
		755					760					765			
Val	Arg	Thr	Ala	Pro	Glu	Pro	Val	Gly	Arg	Val	Ser	Arg	Leu	Gln	Ile
		770					775					780			
Leu	Asn	Ala	Ser	Ser	Asp	Val	Leu	Arg	Ile	Thr	Trp	Val	Gly	Val	Thr
					790					795					800
Gly	Ala	Thr	Ala	Tyr	Arg	Leu	Ala	Trp	Gly	Arg	Ser	Glu	Gly	Gly	Pro
				805					810					815	
Met	Arg	His	Gln	Ile	Leu	Pro	Gly	Asn	Thr	Asp	Ser	Ala	Glu	Ile	Arg
			820					825					830		
Gly	Leu	Glu	Gly	Gly	Val	Ser	Tyr	Ser	Val	Arg	Val	Thr	Ala	Leu	Val
		835					840					845			
Gly	Asp	Arg	Glu	Gly	Thr	Pro	Val	Ser	Ile	Val	Val	Thr	Thr	Pro	Pro
		850				855					860				
Glu	Ala	Pro	Pro	Ala	Leu	Gly	Thr	Leu	His	Val	Val	Gln	Arg	Gly	Glu
					870					875					880
His	Ser	Leu	Arg	Leu	Arg	Trp	Glu	Pro	Val	Pro	Arg	Ala	Gln	Gly	Phe
				885					890					895	
Leu	Leu	His	Trp	Gln	Pro	Glu	Gly	Gly	Gln	Glu	Gln	Ser	Arg	Val	Leu
			900					905					910		
Gly	Pro	Glu	Leu	Ser	Ser	Tyr	His	Leu	Asp	Gly	Leu	Glu	Pro	Ala	Thr
		915					920					925			
Gln	Tyr	Arg	Val	Arg	Leu	Ser	Val	Leu	Gly	Pro	Ala	Gly	Glu	Gly	Pro
		930				935					940				
Ser	Ala	Glu	Val	Thr	Ala	Arg	Thr	Glu	Ser	Pro	Arg	Val	Pro	Ser	Ile
					950					955					960
Glu	Leu	Arg	Val	Val	Asp	Thr	Ser	Ile	Asp	Ser	Val	Thr	Leu	Ala	Trp
				965					970					975	
Thr	Pro	Val	Ser	Arg	Ala	Ser	Ser	Tyr	Ile	Leu	Ser	Trp	Arg	Pro	Leu
			980					985					990		
Arg	Gly	Pro	Gly	Gln	Glu	Val	Pro	Gly	Ser	Pro	Gln	Thr	Leu	Pro	Gly
		995					1000					1005			
Ile	Ser	Ser	Gln	Arg	Val	Thr	Gly	Leu	Glu	Pro	Gly	Val	Ser	Tyr	
		1010			1015					1020					
Ile	Phe	Ser	Leu	Thr	Pro	Val	Leu	Asp	Gly	Val	Arg	Gly	Pro	Glu	Ala
					1030					1035				1040	
Ser	Val	Thr	Gln	Thr	Pro	Val	Cys	Pro	Arg	Gly	Leu	Ala	Asp	Val	Val
				1045					1050					1055	
Phe	Leu	Pro	His	Ala	Thr	Gln	Asp	Asn	Ala	His	Arg	Ala	Glu	Ala	Thr
			1060					1065					1070		
Arg	Arg	Val	Leu	Glu	Arg	Leu	Val	Leu	Ala	Leu	Gly	Pro	Leu	Gly	Pro
		1075					1080					1085			
Gln	Ala	Val	Gln	Val	Gly	Leu	Leu	Ser	Tyr	Ser	His	Arg	Pro	Ser	Pro
		1090				1095					1100				
Leu	Phe	Pro	Leu	Asn	Gly	Ser	His	Asp	Leu	Gly	Ile	Ile	Leu	Gln	Arg
					1110					1115				1120	

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Ile Arg Asp Met Pro Tyr Met Asp Pro Ser Gly Asn Asn Leu Gly Thr
      1125                      1130                      1135
Ala Val Val Thr Ala His Arg Tyr Met Leu Ala Pro Asp Ala Pro Gly
      1140                      1145                      1150
Arg Arg Gln His Val Pro Gly Val Met Val Leu Leu Val Asp Glu Pro
      1155                      1160                      1165
Leu Arg Gly Asp Ile Phe Ser Pro Ile Arg Glu Ala Gln Ala Ser Gly
      1170                      1175                      1180
Leu Asn Val Val Met Leu Gly Met Ala Gly Ala Asp Pro Glu Gln Leu
1185                      1190                      1195                      1200
Arg Arg Leu Ala Pro Gly Met Asp Ser Val Gln Thr Phe Phe Ala Val
      1205                      1210                      1215
Asp Asp Gly Pro Ser Leu Asp Gln Ala Val Ser Gly Leu Ala Thr Ala
      1220                      1225                      1230
Leu Cys Gln Ala Ser Phe Thr Thr Gln Pro Arg Pro Glu Pro Cys Pro
      1235                      1240                      1245
Val Tyr Cys Pro Lys Gly Gln Lys Gly Glu Pro Gly Glu Met Gly Leu
      1250                      1255                      1260
Arg Gly Gln Val Gly Pro Pro Gly Asp Pro Gly Leu Pro Gly Arg Thr
1265                      1270                      1275                      1280
Gly Ala Pro Gly Pro Gln Gly Pro Pro Gly Ser Ala Thr Ala Lys Gly
      1285                      1290                      1295
Glu Arg Gly Phe Pro Gly Ala Asp Gly Arg Pro Gly Ser Pro Gly Arg
      1300                      1305                      1310
Ala Gly Asn Pro Gly Thr Pro Gly Ala Pro Gly Leu Lys Gly Ser Pro
      1315                      1320                      1325
Gly Leu Pro Gly Pro Arg Gly Asp Pro Gly Glu Arg Gly Pro Arg Gly
      1330                      1335                      1340
Pro Lys Gly Glu Pro Gly Ala Pro Gly Gln Val Ile Gly Gly Glu Gly
1345                      1350                      1355                      1360
Pro Gly Leu Pro Gly Arg Lys Gly Asp Pro Gly Pro Ser Gly Pro Pro
      1365                      1370                      1375
Gly Pro Arg Gly Pro Leu Gly Asp Pro Gly Pro Arg Gly Pro Pro Gly
      1380                      1385                      1390
Leu Pro Gly Thr Ala Met Lys Gly Asp Lys Gly Asp Arg Gly Glu Arg
      1395                      1400                      1405
Gly Pro Pro Gly Pro Gly Glu Gly Gly Ile Ala Pro Gly Glu Pro Gly
      1410                      1415                      1420
Leu Pro Gly Leu Pro Gly Ser Pro Gly Pro Gln Gly Pro Val Gly Pro
1425                      1430                      1435                      1440
Pro Gly Lys Lys Gly Glu Lys Gly Asp Ser Glu Asp Gly Ala Pro Gly
      1445                      1450                      1455
Leu Pro Gly Gln Pro Gly Ser Pro Gly Glu Gln Gly Pro Arg Gly Pro
      1460                      1465                      1470
Pro Gly Ala Ile Gly Pro Lys Gly Asp Arg Gly Phe Pro Gly Pro Leu
      1475                      1480                      1485
Gly Glu Ala Gly Glu Lys Gly Glu Arg Gly Pro Pro Gly Pro Ala Gly
1490                      1495                      1500

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Ser Arg Gly Leu Pro Gly Val Ala Gly Arg Pro Gly Ala Lys Gly Pro
 1505 1510 1515 1520
 Glu Gly Pro Pro Gly Pro Thr Gly Arg Gln Gly Glu Lys Gly Glu Pro
 1525 1530 1535
 Gly Arg Pro Gly Asp Pro Ala Val Val Gly Pro Ala Val Ala Gly Pro
 1540 1545 1550
 Lys Gly Glu Lys Gly Asp Val Gly Pro Ala Gly Pro Arg Gly Ala Thr
 1555 1560 1565
 Gly Val Gln Gly Glu Arg Gly Pro Pro Gly Leu Val Leu Pro Gly Asp
 1570 1575 1580
 Pro Gly Pro Lys Gly Asp Pro Gly Asp Arg Gly Pro Ile Gly Leu Thr
 1585 1590 1595 1600
 Gly Arg Ala Gly Pro Pro Gly Asp Ser Gly Pro Pro Gly Glu Lys Gly
 1605 1610 1615
 Asp Pro Gly Arg Pro Gly Pro Pro Gly Pro Val Gly Pro Arg Gly Arg
 1620 1625 1630
 Asp Gly Glu Val Gly Glu Lys Gly Asp Glu Gly Pro Pro Gly Asp Pro
 1635 1640 1645
 Gly Leu Pro Gly Lys Ala Gly Glu Arg Gly Leu Arg Gly Ala Pro Gly
 1650 1655 1660
 Val Arg Gly Pro Val Gly Glu Lys Gly Asp Gln Gly Asp Pro Gly Glu
 1665 1670 1675 1680
 Asp Gly Arg Asn Gly Ser Pro Gly Ser Ser Gly Pro Lys Gly Asp Arg
 1685 1690 1695
 Gly Glu Pro Gly Pro Pro Gly Pro Pro Gly Arg Leu Val Asp Thr Gly
 1700 1705 1710
 Pro Gly Ala Arg Glu Lys Gly Glu Pro Gly Asp Arg Gly Gln Glu Gly
 1715 1720 1725
 Pro Arg Gly Pro Lys Gly Asp Pro Gly Leu Pro Gly Ala Pro Gly Glu
 1730 1735 1740
 Arg Gly Ile Glu Gly Phe Arg Gly Pro Pro Gly Pro Gln Gly Asp Pro
 1745 1750 1755 1760
 Gly Val Arg Gly Pro Ala Gly Glu Lys Gly Asp Arg Gly Pro Pro Gly
 1765 1770 1775
 Leu Asp Gly Arg Ser Gly Leu Asp Gly Lys Pro Gly Ala Ala Gly Pro
 1780 1785 1790
 Ser Gly Pro Asn Gly Ala Ala Gly Lys Ala Gly Asp Pro Gly Arg Asp
 1795 1800 1805
 Gly Leu Pro Gly Leu Arg Gly Glu Gln Gly Leu Pro Gly Pro Ser Gly
 1810 1815 1820
 Pro Pro Gly Leu Pro Gly Lys Pro Gly Glu Asp Gly Lys Pro Gly Leu
 1825 1830 1835 1840
 Asn Gly Lys Asn Gly Glu Pro Gly Asp Pro Gly Glu Asp Gly Arg Lys
 1845 1850 1855
 Gly Glu Lys Gly Asp Ser Gly Ala Ser Gly Arg Glu Gly Arg Asp Gly
 1860 1865 1870
 Pro Lys Gly Glu Arg Gly Ala Pro Gly Ile Leu Gly Pro Gln Gly Pro
 1875 1880 1885

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Pro Gly Leu Pro Gly Pro Val Gly Pro Pro Gly Gln Gly Phe Pro Gly
 1890 1895 1900
 Val Pro Gly Gly Thr Gly Pro Lys Gly Asp Arg Gly Glu Thr Gly Ser
 1905 1910 1915 1920
 Lys Gly Glu Gln Gly Leu Pro Gly Glu Arg Gly Leu Arg Gly Glu Pro
 1925 1930 1935
 Gly Ser Val Pro Asn Val Asp Arg Leu Leu Glu Thr Ala Gly Ile Lys
 1940 1945 1950
 Ala Ser Ala Leu Arg Glu Ile Val Glu Thr Trp Asp Glu Ser Ser Gly
 1955 1960 1965
 Ser Phe Leu Pro Val Pro Glu Arg Arg Arg Gly Pro Lys Gly Asp Ser
 1970 1975 1980
 Gly Glu Gln Gly Pro Pro Gly Lys Glu Gly Pro Ile Gly Phe Pro Gly
 1985 1990 1995 2000
 Glu Arg Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Pro Gln Gly Pro
 2005 2010 2015
 Pro Gly Leu Ala Leu Gly Glu Arg Gly Pro Pro Gly Pro Ser Gly Leu
 2020 2025 2030
 Ala Gly Glu Pro Gly Lys Pro Gly Ile Pro Gly Leu Pro Gly Arg Ala
 2035 2040 2045
 Gly Gly Val Gly Glu Ala Gly Arg Pro Gly Glu Arg Gly Glu Arg Gly
 2050 2055 2060
 Glu Lys Gly Glu Arg Gly Glu Gln Gly Arg Asp Gly Pro Pro Gly Leu
 2065 2070 2075 2080
 Pro Gly Thr Pro Gly Pro Pro Gly Pro Pro Gly Pro Lys Val Ser Val
 2085 2090 2095
 Asp Glu Pro Gly Pro Gly Leu Ser Gly Glu Gln Gly Pro Pro Gly Leu
 2100 2105 2110
 Lys Gly Ala Lys Gly Glu Pro Gly Ser Asn Gly Asp Gln Gly Pro Lys
 2115 2120 2125
 Gly Asp Arg Gly Val Pro Gly Ile Lys Gly Asp Arg Gly Glu Pro Gly
 2130 2135 2140
 Pro Arg Gly Gln Asp Gly Asn Pro Gly Leu Pro Gly Glu Arg Gly Met
 2145 2150 2155 2160
 Ala Gly Pro Glu Gly Lys Pro Gly Leu Gln Gly Pro Arg Gly Pro Pro
 2165 2170 2175
 Gly Pro Val Gly Gly His Gly Asp Pro Gly Pro Pro Gly Ala Pro Gly
 2180 2185 2190
 Leu Ala Gly Pro Ala Gly Pro Gln Gly Pro Ser Gly Leu Lys Gly Glu
 2195 2200 2205
 Pro Gly Glu Thr Gly Pro Pro Gly Arg Gly Leu Thr Gly Pro Thr Gly
 2210 2215 2220
 Ala Val Gly Leu Pro Gly Pro Pro Gly Pro Ser Gly Leu Val Gly Pro
 2225 2230 2235 2240
 Gln Gly Ser Pro Gly Leu Pro Gly Gln Val Gly Glu Thr Gly Lys Pro
 2245 2250 2255
 Gly Ala Pro Gly Arg Asp Gly Ala Ser Gly Lys Asp Gly Asp Arg Gly
 2260 2265 2270

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Ser	Pro	Gly	Val	Pro	Gly	Ser	Pro	Gly	Leu	Pro	Gly	Pro	Val	Gly	Pro	2275	2280	2285
Lys	Gly	Glu	Pro	Gly	Pro	Thr	Gly	Ala	Pro	Gly	Gln	Ala	Val	Val	Gly	2290	2295	2300
Leu	Pro	Gly	Ala	Lys	Gly	Glu	Lys	Gly	Ala	Pro	Gly	Gly	Leu	Ala	Gly	2305	2310	2315
Asp	Leu	Val	Gly	Glu	Pro	Gly	Ala	Lys	Gly	Asp	Arg	Gly	Leu	Pro	Gly	2325	2330	2335
Pro	Arg	Gly	Glu	Lys	Gly	Glu	Ala	Gly	Arg	Ala	Gly	Glu	Pro	Gly	Asp	2340	2345	2350
Pro	Gly	Glu	Asp	Gly	Gln	Lys	Gly	Ala	Pro	Gly	Pro	Lys	Gly	Phe	Lys	2355	2360	2365
Gly	Asp	Pro	Gly	Val	Gly	Val	Pro	Gly	Ser	Pro	Gly	Pro	Pro	Gly	Pro	2370	2375	2380
Pro	Gly	Val	Lys	Gly	Asp	Leu	Gly	Leu	Pro	Gly	Leu	Pro	Gly	Ala	Pro	2385	2390	2395
Gly	Val	Val	Gly	Phe	Pro	Gly	Gln	Thr	Gly	Pro	Arg	Gly	Glu	Met	Gly	2405	2410	2415
Gln	Pro	Gly	Pro	Ser	Gly	Glu	Arg	Gly	Leu	Ala	Gly	Pro	Pro	Gly	Arg	2420	2425	2430
Glu	Gly	Ile	Pro	Gly	Pro	Leu	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Ser	Val	2435	2440	2445
Gly	Pro	Pro	Gly	Ala	Ser	Gly	Leu	Lys	Gly	Asp	Lys	Gly	Asp	Pro	Gly	2450	2455	2460
Val	Gly	Leu	Pro	Gly	Pro	Arg	Gly	Glu	Arg	Gly	Glu	Pro	Gly	Ile	Arg	2465	2470	2475
Gly	Glu	Asp	Gly	Arg	Pro	Gly	Gln	Glu	Gly	Pro	Arg	Gly	Leu	Thr	Gly	2485	2490	2495
Pro	Pro	Gly	Ser	Arg	Gly	Glu	Arg	Gly	Glu	Lys	Gly	Asp	Val	Gly	Ser	2500	2505	2510
Ala	Gly	Leu	Lys	Gly	Asp	Lys	Gly	Asp	Ser	Ala	Val	Ile	Leu	Gly	Pro	2515	2520	2525
Pro	Gly	Pro	Arg	Gly	Ala	Lys	Gly	Asp	Met	Gly	Glu	Arg	Gly	Pro	Arg	2530	2535	2540
Gly	Leu	Asp	Gly	Asp	Lys	Gly	Pro	Arg	Gly	Asp	Asn	Gly	Asp	Pro	Gly	2545	2550	2555
Asp	Lys	Gly	Ser	Lys	Gly	Glu	Pro	Gly	Asp	Lys	Gly	Ser	Ala	Gly	Leu	2565	2570	2575
Pro	Gly	Leu	Arg	Gly	Leu	Leu	Gly	Pro	Gln	Gly	Gln	Pro	Gly	Ala	Ala	2580	2585	2590
Gly	Ile	Pro	Gly	Asp	Pro	Gly	Ser	Pro	Gly	Lys	Asp	Gly	Val	Pro	Gly	2595	2600	2605
Ile	Arg	Gly	Glu	Lys	Gly	Asp	Val	Gly	Phe	Met	Gly	Pro	Arg	Gly	Leu	2610	2615	2620
Lys	Gly	Glu	Arg	Gly	Val	Lys	Gly	Ala	Cys	Gly	Leu	Asp	Gly	Glu	Lys	2625	2630	2635
Gly	Asp	Lys	Gly	Glu	Ala	Gly	Pro	Pro	Gly	Arg	Pro	Gly	Leu	Ala	Gly	2645	2650	2655

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His	Lys	Gly	Glu	Met	Gly	Glu	Pro	Gly	Val	Pro	Gly	Gln	Ser	Gly	Ala	2660	2665	2670
Pro	Gly	Lys	Glu	Gly	Leu	Ile	Gly	Pro	Lys	Gly	Asp	Arg	Gly	Phe	Asp	2675	2680	2685
Gly	Gln	Pro	Gly	Pro	Lys	Gly	Asp	Gln	Gly	Glu	Lys	Gly	Glu	Arg	Gly	2690	2695	2700
Thr	Pro	Gly	Ile	Gly	Gly	Phe	Pro	Gly	Pro	Ser	Gly	Asn	Asp	Gly	Ser	2705	2710	2715
Ala	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Ser	Val	Gly	Pro	Arg	Gly	Pro	Glu	2725	2730	2735
Gly	Leu	Gln	Gly	Gln	Lys	Gly	Glu	Arg	Gly	Pro	Pro	Gly	Glu	Arg	Val	2740	2745	2750
Val	Gly	Ala	Pro	Gly	Val	Pro	Gly	Ala	Pro	Gly	Glu	Arg	Gly	Glu	Gln	2755	2760	2765
Gly	Arg	Pro	Gly	Pro	Ala	Gly	Pro	Arg	Gly	Glu	Lys	Gly	Glu	Ala	Ala	2770	2775	2780
Leu	Thr	Glu	Asp	Asp	Ile	Arg	Gly	Phe	Val	Arg	Gln	Glu	Met	Ser	Gln	2785	2790	2795
His	Cys	Ala	Cys	Gln	Gly	Gln	Phe	Ile	Ala	Ser	Gly	Ser	Arg	Pro	Leu	2805	2810	2815
Pro	Ser	Tyr	Ala	Ala	Asp	Thr	Ala	Gly	Ser	Gln	Leu	His	Ala	Val	Pro	2820	2825	2830
Val	Leu	Arg	Val	Ser	His	Ala	Glu	Glu	Glu	Glu	Arg	Val	Pro	Pro	Glu	2835	2840	2845
Asp	Asp	Glu	Tyr	Ser	Glu	Tyr	Ser	Glu	Tyr	Ser	Val	Glu	Glu	Tyr	Gln	2850	2855	2860
Asp	Pro	Glu	Ala	Pro	Trp	Asp	Ser	Asp	Asp	Pro	Cys	Ser	Leu	Pro	Leu	2865	2870	2875
Asp	Glu	Gly	Ser	Cys	Thr	Ala	Tyr	Thr	Leu	Arg	Trp	Tyr	His	Arg	Ala	2885	2890	2895
Val	Thr	Gly	Ser	Thr	Glu	Ala	Cys	His	Pro	Phe	Val	Tyr	Gly	Gly	Cys	2900	2905	2910
Gly	Gly	Asn	Ala	Asn	Arg	Phe	Gly	Thr	Arg	Glu	Ala	Cys	Glu	Arg	Arg	2915	2920	2925
Cys	Pro	Pro	Arg	Val	Val	Gln	Ser	Gln	Gly	Thr	Gly	Thr	Ala	Gln	Asp	2930	2935	2940
Arg	Ala	Lys	Arg	Gly	Ser	Gly	Glu	Gly	Arg	Gly	Ser	Leu	Leu	Thr	Cys	2945	2950	2955
Gly	Asp	Val	Glu	Glu	Asn	Pro	Gly	Pro	Thr	Ser	Ser	Gly	Pro	Gly	Pro	2965	2970	2975
Arg	Phe	Leu	Leu	Leu	Leu	Pro	Leu	Leu	Leu	Pro	Pro	Ala	Ala	Ser	Ala	2980	2985	2990
Ser	Asp	Arg	Pro	Arg	Gly	Arg	Asp	Pro	Val	Asn	Pro	Glu	Lys	Leu	Leu	2995	3000	3005
Val	Ile	Thr	Val	Ala	Thr	Ala	Glu	Thr	Glu	Gly	Tyr	Leu	Arg	Phe	Leu	3010	3015	3020
Arg	Ser	Ala	Glu	Phe	Phe	Asn	Tyr	Thr	Val	Arg	Thr	Leu	Gly	Leu	Gly	3025	3030	3035

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Glu Glu Trp Arg Gly Gly Asp Val Ala Arg Thr Val Gly Gly Gly Gln
 3045 3050 3055
 Lys Val Arg Trp Leu Lys Lys Glu Met Glu Lys Tyr Ala Asp Arg Glu
 3060 3065 3070
 Asp Met Ile Ile Met Phe Val Asp Ser Tyr Asp Val Ile Leu Ala Gly
 3075 3080 3085
 Ser Pro Thr Glu Leu Leu Lys Lys Phe Val Gln Ser Gly Ser Arg Leu
 3090 3095 3100
 Leu Phe Ser Ala Glu Ser Phe Cys Trp Pro Glu Trp Gly Leu Ala Glu
 3105 3110 3115 3120
 Gln Tyr Pro Glu Val Gly Thr Gly Lys Arg Phe Leu Asn Ser Gly Gly
 3125 3130 3135
 Phe Ile Gly Phe Ala Thr Thr Ile His Gln Ile Val Arg Gln Trp Lys
 3140 3145 3150
 Tyr Lys Asp Asp Asp Asp Asp Gln Leu Phe Tyr Thr Arg Leu Tyr Leu
 3155 3160 3165
 Asp Pro Gly Leu Arg Glu Lys Leu Ser Leu Asn Leu Asp His Lys Ser
 3170 3175 3180
 Arg Ile Phe Gln Asn Leu Asn Gly Ala Leu Asp Glu Val Val Leu Lys
 3185 3190 3195 3200
 Phe Asp Arg Asn Arg Val Arg Ile Arg Asn Val Ala Tyr Asp Thr Leu
 3205 3210 3215
 Pro Ile Val Val His Gly Asn Gly Pro Thr Lys Leu Gln Leu Asn Tyr
 3220 3225 3230
 Leu Gly Asn Tyr Val Pro Asn Gly Trp Thr Pro Glu Gly Gly Cys Gly
 3235 3240 3245
 Phe Cys Asn Gln Asp Arg Arg Thr Leu Pro Gly Gly Gln Pro Pro Pro
 3250 3255 3260
 Arg Val Phe Leu Ala Val Phe Val Glu Gln Pro Thr Pro Phe Leu Pro
 3265 3270 3275 3280
 Arg Phe Leu Gln Arg Leu Leu Leu Leu Asp Tyr Pro Pro Asp Arg Val
 3285 3290 3295
 Thr Leu Phe Leu His Asn Asn Glu Val Phe His Glu Pro His Ile Ala
 3300 3305 3310
 Asp Ser Trp Pro Gln Leu Gln Asp His Phe Ser Ala Val Lys Leu Val
 3315 3320 3325
 Gly Pro Glu Glu Ala Leu Ser Pro Gly Glu Ala Arg Asp Met Ala Met
 3330 3335 3340
 Asp Leu Cys Arg Gln Asp Pro Glu Cys Glu Phe Tyr Phe Ser Leu Asp
 3345 3350 3355 3360
 Ala Asp Ala Val Leu Thr Asn Leu Gln Thr Leu Arg Ile Leu Ile Glu
 3365 3370 3375
 Glu Asn Arg Lys Val Ile Ala Pro Met Leu Ser Arg His Gly Lys Leu
 3380 3385 3390
 Trp Ser Asn Phe Trp Gly Ala Leu Ser Pro Asp Glu Tyr Tyr Ala Arg
 3395 3400 3405
 Ser Glu Asp Tyr Val Glu Leu Val Gln Arg Lys Arg Val Gly Val Trp
 3410 3415 3420

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Asn Val Pro Tyr Ile Ser Gln Ala Tyr Val Ile Arg Gly Asp Thr Leu			
3425	3430	3435	3440
Arg Met Glu Leu Pro Gln Arg Asp Val Phe Ser Gly Ser Asp Thr Asp			
	3445	3450	3455
Pro Asp Met Ala Phe Cys Lys Ser Phe Arg Asp Lys Gly Ile Phe Leu			
	3460	3465	3470
His Leu Ser Asn Gln His Glu Phe Gly Arg Leu Leu Ala Thr Ser Arg			
	3475	3480	3485
Tyr Asp Thr Glu His Leu His Pro Asp Leu Trp Gln Ile Phe Asp Asn			
	3490	3495	3500
Pro Val Asp Trp Lys Glu Gln Tyr Ile His Glu Asn Tyr Ser Arg Ala			
	3505	3510	3515
Leu Glu Gly Glu Gly Ile Val Glu Gln Pro Cys Pro Asp Val Tyr Trp			
	3525	3530	3535
Phe Pro Leu Leu Ser Glu Gln Met Cys Asp Glu Leu Val Ala Glu Met			
	3540	3545	3550
Glu His Tyr Gly Gln Trp Ser Gly Gly Arg His Glu Asp Ser Arg Leu			
	3555	3560	3565
Ala Gly Gly Tyr Glu Asn Val Pro Thr Val Asp Ile His Met Lys Gln			
	3570	3575	3580
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Arg Pro His His Asp Ser Ser Thr Phe Thr Leu Asn Val Ala Leu Asn			
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His Lys Gly Leu Asp Tyr Glu Gly Gly Gly Cys Arg Phe Leu Arg Tyr			
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Leu Pro Gly Gly Gln Pro Pro Pro Arg Val Phe Leu Ala Val Phe Val
290          295          300
Glu Gln Pro Thr Pro Phe Leu Pro Arg Phe Leu Gln Arg Leu Leu Leu
305          310          315          320
Leu Asp Tyr Pro Pro Asp Arg Val Thr Leu Phe Leu His Asn Asn Glu
325          330          335
Val Phe His Glu Pro His Ile Ala Asp Ser Trp Pro Gln Leu Gln Asp
340          345          350
His Phe Ser Ala Val Lys Leu Val Gly Pro Glu Glu Ala Leu Ser Pro

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		355					360				365				
Gly 370	Glu 375	Ala 380	Arg 385	Asp 390	Met 395	Ala 400	Met 405	Asp 410	Leu 415	Cys 420	Arg 425	Gln 430	Asp 435	Pro 440	Glu 445
Cys 450	Glu 455	Phe 460	Tyr 465	Phe 470	Ser 475	Leu 480	Asp 485	Ala 490	Asp 495	Ala 500	Val 505	Leu 510	Thr 515	Asn 520	Leu 525
Gln 530	Thr 535	Leu 540	Arg 545	Ile 550	Leu 555	Ile 560	Glu 565	Glu 570	Asn 575	Arg 580	Lys 585	Val 590	Ile 595	Ala 600	Pro 605
Met 610	Leu 615	Ser 620	Arg 625	His 630	Gly 635	Lys 640	Leu 645	Trp 650	Ser 655	Asn 660	Phe 665	Trp 670	Gly 675	Ala 680	Leu 685
Ser 690	Pro 695	Asp 700	Glu 705	Tyr 710	Tyr 715	Ala 720	Arg 725	Ser 730	Glu 735	Asp 740	Tyr 745	Val 750	Glu 755	Leu 760	Val 765
Gln 770	Arg 775	Lys 780	Arg 785	Val 790	Gly 795	Val 800	Trp 805	Asn 810	Val 815	Pro 820	Tyr 825	Ile 830	Ser 835	Gln 840	Ala 845
Tyr 850	Val 855	Ile 860	Arg 865	Gly 870	Asp 875	Thr 880	Leu 885	Arg 890	Met 895	Glu 900	Leu 905	Pro 910	Gln 915	Arg 920	Asp 925
Val 930	Phe 935	Ser 940	Gly 945	Ser 950	Asp 955	Thr 960	Asp 965	Pro 970	Asp 975	Met 980	Ala 985	Phe 990	Cys 995	Lys 1000	Ser 1005
Phe 1010	Arg 1015	Asp 1020	Lys 1025	Gly 1030	Ile 1035	Phe 1040	Leu 1045	His 1050	Leu 1055	Ser 1060	Asn 1065	Gln 1070	His 1075	Glu 1080	Phe 1085
Gly 1090	Arg 1095	Leu 1100	Leu 1105	Ala 1110	Thr 1115	Ser 1120	Arg 1125	Tyr 1130	Asp 1135	Thr 1140	Glu 1145	His 1150	Leu 1155	His 1160	Pro 1165
Asp 1170	Leu 1175	Trp 1180	Gln 1185	Ile 1190	Phe 1195	Asp 1200	Asn 1205	Pro 1210	Val 1215	Asp 1220	Trp 1225	Lys 1230	Glu 1235	Gln 1240	Tyr 1245
Ile 1250	His 1255	Glu 1260	Asn 1265	Tyr 1270	Ser 1275	Arg 1280	Ala 1285	Leu 1290	Glu 1295	Gly 1300	Glu 1305	Gly 1310	Ile 1315	Val 1320	Glu 1325
Gln 1330	Pro 1335	Cys 1340	Pro 1345	Asp 1350	Val 1355	Tyr 1360	Trp 1365	Phe 1370	Pro 1375	Leu 1380	Leu 1385	Ser 1390	Glu 1395	Gln 1400	Met 1405
Cys 1410	Asp 1415	Glu 1420	Leu 1425	Val 1430	Ala 1435	Glu 1440	Met 1445	Glu 1450	His 1455	Tyr 1460	Gly 1465	Gln 1470	Trp 1475	Ser 1480	Gly 1485
Gly 1490	Arg 1495	His 1500	Glu 1505	Asp 1510	Ser 1515	Arg 1520	Leu 1525	Ala 1530	Gly 1535	Gly 1540	Tyr 1545	Glu 1550	Asn 1555	Val 1560	Pro 1565
Thr 1570	Val 1575	Asp 1580	Ile 1585	His 1590	Met 1595	Lys 1600	Gln 1605	Val 1610	Gly 1615	Tyr 1620	Glu 1625	Asp 1630	Gln 1635	Trp 1640	Leu 1645
Gln 1650	Leu 1655	Leu 1660	Arg 1665	Thr 1670	Tyr 1675	Val 1680	Gly 1685	Pro 1690	Met 1695	Thr 1700	Glu 1705	Ser 1710	Leu 1715	Phe 1720	Pro 1725
Gly 1730	Tyr 1735	His 1740	Thr 1745	Lys 1750	Ala 1755	Arg 1760	Ala 1765	Val 1770	Met 1775	Asn 1780	Phe 1785	Val 1790	Val 1795	Arg 1800	Tyr 1805
Arg 1810	Pro 1815	Asp 1820	Glu 1825	Gln 1830	Pro 1835	Ser 1840	Leu 1845	Arg 1850	Pro 1855	His 1860	His 1865	Asp 1870	Ser 1875	Ser 1880	Thr 1885
Phe 1890	Thr 1895	Leu 1900	Asn 1905	Val 1910	Ala 1915	Leu 1920	Asn 1925	His 1930	Lys 1935	Gly 1940	Leu 1945	Asp 1950	Tyr 1955	Glu 1960	Gly 1965
Gly 1970	Gly 1975	Cys 1980	Arg 1985	Phe 1990	Leu 1995	Arg 2000	Tyr 2005	Asp 2010	Cys 2015	Val 2020	Ile 2025	Ser 2030	Ser 2035	Pro 2040	Arg 2045
Lys 2050	Gly 2055	Trp 2060	Ala 2065	Leu 2070	Leu 2075	His 2080	Pro 2085	Gly 2090	Arg 2095	Leu 2100	Thr 2105	His 2110	Tyr 2115	His 2120	Glu 2125
Gly 2130	Leu 2135	Pro 2140	Thr 2145	Thr 2150	Trp 2155	Gly 2160									

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			740					745				750			
Thr	Cys	Gly	Asp	Val	Glu	Glu	Asn	Pro	Gly	Pro	Thr	Leu	Arg	Leu	Leu
		755					760					765			
Val	Ala	Ala	Leu	Cys	Ala	Gly	Ile	Leu	Ala	Glu	Ala	Pro	Arg	Val	Arg
	770					775					780				
Ala	Gln	His	Arg	Glu	Arg	Val	Thr	Cys	Thr	Arg	Leu	Tyr	Ala	Ala	Asp
785				790						795					800
Ile	Val	Phe	Leu	Leu	Asp	Gly	Ser	Ser	Ser	Ile	Gly	Arg	Ser	Asn	Phe
			805					810						815	
Arg	Glu	Val	Arg	Ser	Phe	Leu	Glu	Gly	Leu	Val	Leu	Pro	Phe	Ser	Gly
			820					825					830		
Ala	Ala	Ser	Ala	Gln	Gly	Val	Arg	Phe	Ala	Thr	Val	Gln	Tyr	Ser	Asp
		835					840					845			
Asp	Pro	Arg	Thr	Glu	Phe	Gly	Leu	Asp	Ala	Leu	Gly	Ser	Gly	Gly	Asp
	850					855					860				
Val	Ile	Arg	Ala	Ile	Arg	Glu	Leu	Ser	Tyr	Lys	Gly	Gly	Asn	Thr	Arg
865				870						875					880
Thr	Gly	Ala	Ala	Ile	Leu	His	Val	Ala	Asp	His	Val	Phe	Leu	Pro	Gln
			885						890						895
Leu	Ala	Arg	Pro	Gly	Val	Pro	Lys	Val	Cys	Ile	Leu	Ile	Thr	Asp	Gly
			900					905					910		
Lys	Ser	Gln	Asp	Leu	Val	Asp	Thr	Ala	Ala	Gln	Arg	Leu	Lys	Gly	Gln
	915						920					925			
Gly	Val	Lys	Leu	Phe	Ala	Val	Gly	Ile	Lys	Asn	Ala	Asp	Pro	Glu	Glu
	930					935					940				
Leu	Lys	Arg	Val	Ala	Ser	Gln	Pro	Thr	Ser	Asp	Phe	Phe	Phe	Phe	Val
945				950						955					960
Asn	Asp	Phe	Ser	Ile	Leu	Arg	Thr	Leu	Leu	Pro	Leu	Val	Ser	Arg	Arg
			965						970					975	
Val	Cys	Thr	Thr	Ala	Gly	Gly	Val	Pro	Val	Thr	Arg	Pro	Pro	Asp	Asp
			980					985					990		
Ser	Thr	Ser	Ala	Pro	Arg	Asp	Leu	Val	Leu	Ser	Glu	Pro	Ser	Ser	Gln
		995				1000						1005			
Ser	Leu	Arg	Val	Gln	Trp	Thr	Ala	Ala	Ser	Gly	Pro	Val	Thr	Gly	Tyr
	1010					1015					1020				
Lys	Val	Gln	Tyr	Thr	Pro	Leu	Thr	Gly	Leu	Gly	Gln	Pro	Leu	Pro	Ser
1025					1030					1035					1040
Glu	Arg	Gln	Glu	Val	Asn	Val	Pro	Ala	Gly	Glu	Thr	Ser	Val	Arg	Leu
			1045						1050					1055	
Arg	Gly	Leu	Arg	Pro	Leu	Thr	Glu	Tyr	Gln	Val	Thr	Val	Ile	Ala	Leu
			1060					1065					1070		
Tyr	Ala	Asn	Ser	Ile	Gly	Glu	Ala	Val	Ser	Gly	Thr	Ala	Arg	Thr	Thr
	1075						1080					1085			
Ala	Leu	Glu	Gly	Pro	Glu	Leu	Thr	Ile	Gln	Asn	Thr	Thr	Ala	His	Ser
	1090					1095					1100				
Leu	Leu	Val	Ala	Trp	Arg	Ser	Val	Pro	Gly	Ala	Thr	Gly	Tyr	Arg	Val
1105					1110					1115					1120
Thr	Trp	Arg	Val	Leu	Ser	Gly	Gly	Pro	Thr	Gln	Gln	Gln	Glu	Leu	Gly

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	1125		1130		1135
Pro Gly Gln Gly Ser Val Leu Leu Arg Asp Leu Glu Pro Gly Thr Asp					
	1140		1145		1150
Tyr Glu Val Thr Val Ser Thr Leu Phe Gly Arg Ser Val Gly Pro Ala					
	1155		1160		1165
Thr Ser Leu Met Ala Arg Thr Asp Ala Ser Val Glu Gln Thr Leu Arg					
	1170		1175		1180
Pro Val Ile Leu Gly Pro Thr Ser Ile Leu Leu Ser Trp Asn Leu Val					
1185	1190		1195		1200
Pro Glu Ala Arg Gly Tyr Arg Leu Glu Trp Arg Arg Glu Thr Gly Leu					
	1205		1210		1215
Glu Pro Pro Gln Lys Val Val Leu Pro Ser Asp Val Thr Arg Tyr Gln					
	1220		1225		1230
Leu Asp Gly Leu Gln Pro Gly Thr Glu Tyr Arg Leu Thr Leu Tyr Thr					
	1235		1240		1245
Leu Leu Glu Gly His Glu Val Ala Thr Pro Ala Thr Val Val Pro Thr					
	1250		1255		1260
Gly Pro Glu Leu Pro Val Ser Pro Val Thr Asp Leu Gln Ala Thr Glu					
1265	1270		1275		1280
Leu Pro Gly Gln Arg Val Arg Val Ser Trp Ser Pro Val Pro Gly Ala					
	1285		1290		1295
Thr Gln Tyr Arg Ile Ile Val Arg Ser Thr Gln Gly Val Glu Arg Thr					
	1300		1305		1310
Leu Val Leu Pro Gly Ser Gln Thr Ala Phe Asp Leu Asp Asp Val Gln					
	1315		1320		1325
Ala Gly Leu Ser Tyr Thr Val Arg Val Ser Ala Arg Val Gly Pro Arg					
	1330		1335		1340
Glu Gly Ser Ala Ser Val Leu Thr Val Arg Arg Glu Pro Glu Thr Pro					
1345	1350		1355		1360
Leu Ala Val Pro Gly Leu Arg Val Val Val Ser Asp Ala Thr Arg Val					
	1365		1370		1375
Arg Val Ala Trp Gly Pro Val Pro Gly Ala Ser Gly Phe Arg Ile Ser					
	1380		1385		1390
Trp Ser Thr Gly Ser Gly Pro Glu Ser Ser Gln Thr Leu Pro Pro Asp					
	1395		1400		1405
Ser Thr Ala Thr Asp Ile Thr Gly Leu Gln Pro Gly Thr Thr Tyr Gln					
	1410		1415		1420
Val Ala Val Ser Val Leu Arg Gly Arg Glu Glu Gly Pro Ala Ala Val					
1425	1430		1435		1440
Ile Val Ala Arg Thr Asp Pro Leu Gly Pro Val Arg Thr Val His Val					
	1445		1450		1455
Thr Gln Ala Ser Ser Ser Ser Val Thr Ile Thr Trp Thr Arg Val Pro					
	1460		1465		1470
Gly Ala Thr Gly Tyr Arg Val Ser Trp His Ser Ala His Gly Pro Glu					
	1475		1480		1485
Lys Ser Gln Leu Val Ser Gly Glu Ala Thr Val Ala Glu Leu Asp Gly					
	1490		1495		1500
Leu Glu Pro Asp Thr Glu Tyr Thr Val His Val Arg Ala His Val Ala					

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1505          1510          1515          1520
Gly Val Asp Gly Pro Pro Ala Ser Val Val Val Arg Thr Ala Pro Glu
          1525          1530          1535
Pro Val Gly Arg Val Ser Arg Leu Gln Ile Leu Asn Ala Ser Ser Asp
          1540          1545          1550
Val Leu Arg Ile Thr Trp Val Gly Val Thr Gly Ala Thr Ala Tyr Arg
          1555          1560          1565
Leu Ala Trp Gly Arg Ser Glu Gly Gly Pro Met Arg His Gln Ile Leu
          1570          1575          1580
Pro Gly Asn Thr Asp Ser Ala Glu Ile Arg Gly Leu Glu Gly Gly Val
1585          1590          1595          1600
Ser Tyr Ser Val Arg Val Thr Ala Leu Val Gly Asp Arg Glu Gly Thr
          1605          1610          1615
Pro Val Ser Ile Val Val Thr Thr Pro Pro Glu Ala Pro Pro Ala Leu
          1620          1625          1630
Gly Thr Leu His Val Val Gln Arg Gly Glu His Ser Leu Arg Leu Arg
          1635          1640          1645
Trp Glu Pro Val Pro Arg Ala Gln Gly Phe Leu Leu His Trp Gln Pro
          1650          1655          1660
Glu Gly Gly Gln Glu Gln Ser Arg Val Leu Gly Pro Glu Leu Ser Ser
1665          1670          1675          1680
Tyr His Leu Asp Gly Leu Glu Pro Ala Thr Gln Tyr Arg Val Arg Leu
          1685          1690          1695
Ser Val Leu Gly Pro Ala Gly Glu Gly Pro Ser Ala Glu Val Thr Ala
          1700          1705          1710
Arg Thr Glu Ser Pro Arg Val Pro Ser Ile Glu Leu Arg Val Val Asp
          1715          1720          1725
Thr Ser Ile Asp Ser Val Thr Leu Ala Trp Thr Pro Val Ser Arg Ala
          1730          1735          1740
Ser Ser Tyr Ile Leu Ser Trp Arg Pro Leu Arg Gly Pro Gly Gln Glu
1745          1750          1755          1760
Val Pro Gly Ser Pro Gln Thr Leu Pro Gly Ile Ser Ser Ser Gln Arg
          1765          1770          1775
Val Thr Gly Leu Glu Pro Gly Val Ser Tyr Ile Phe Ser Leu Thr Pro
          1780          1785          1790
Val Leu Asp Gly Val Arg Gly Pro Glu Ala Ser Val Thr Gln Thr Pro
          1795          1800          1805
Val Cys Pro Arg Gly Leu Ala Asp Val Val Phe Leu Pro His Ala Thr
          1810          1815          1820
Gln Asp Asn Ala His Arg Ala Glu Ala Thr Arg Arg Val Leu Glu Arg
1825          1830          1835          1840
Leu Val Leu Ala Leu Gly Pro Leu Gly Pro Gln Ala Val Gln Val Gly
          1845          1850          1855
Leu Leu Ser Tyr Ser His Arg Pro Ser Pro Leu Phe Pro Leu Asn Gly
          1860          1865          1870
Ser His Asp Leu Gly Ile Ile Leu Gln Arg Ile Arg Asp Met Pro Tyr
          1875          1880          1885
Met Asp Pro Ser Gly Asn Asn Leu Gly Thr Ala Val Val Thr Ala His

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1890	1895	1900
Arg Tyr Met Leu Ala Pro Asp Ala Pro Gly Arg Arg Gln His Val Pro		
1905	1910	1915
Gly Val Met Val Leu Leu Val Asp Glu Pro Leu Arg Gly Asp Ile Phe		1920
	1925	1930
Ser Pro Ile Arg Glu Ala Gln Ala Ser Gly Leu Asn Val Val Met Leu		1935
	1940	1945
Gly Met Ala Gly Ala Asp Pro Glu Gln Leu Arg Arg Leu Ala Pro Gly		1950
	1955	1960
Met Asp Ser Val Gln Thr Phe Phe Ala Val Asp Asp Gly Pro Ser Leu		1965
	1970	1975
Asp Gln Ala Val Ser Gly Leu Ala Thr Ala Leu Cys Gln Ala Ser Phe		1980
1985	1990	1995
Thr Thr Gln Pro Arg Pro Glu Pro Cys Pro Val Tyr Cys Pro Lys Gly		2000
	2005	2010
Gln Lys Gly Glu Pro Gly Glu Met Gly Leu Arg Gly Gln Val Gly Pro		2015
	2020	2025
Pro Gly Asp Pro Gly Leu Pro Gly Arg Thr Gly Ala Pro Gly Pro Gln		2030
	2035	2040
Gly Pro Pro Gly Ser Ala Thr Ala Lys Gly Glu Arg Gly Phe Pro Gly		2045
	2050	2055
Ala Asp Gly Arg Pro Gly Ser Pro Gly Arg Ala Gly Asn Pro Gly Thr		2060
2065	2070	2075
Pro Gly Ala Pro Gly Leu Lys Gly Ser Pro Gly Leu Pro Gly Pro Arg		2080
	2085	2090
Gly Asp Pro Gly Glu Arg Gly Pro Arg Gly Pro Lys Gly Glu Pro Gly		2095
	2100	2105
Ala Pro Gly Gln Val Ile Gly Gly Glu Gly Pro Gly Leu Pro Gly Arg		2110
	2115	2120
Lys Gly Asp Pro Gly Pro Ser Gly Pro Pro Gly Pro Arg Gly Pro Leu		2125
	2130	2135
Gly Asp Pro Gly Pro Arg Gly Pro Pro Gly Leu Pro Gly Thr Ala Met		2140
2145	2150	2155
Lys Gly Asp Lys Gly Asp Arg Gly Glu Arg Gly Pro Pro Gly Pro Gly		2160
	2165	2170
Glu Gly Gly Ile Ala Pro Gly Glu Pro Gly Leu Pro Gly Leu Pro Gly		2175
	2180	2185
Ser Pro Gly Pro Gln Gly Pro Val Gly Pro Pro Gly Lys Lys Gly Glu		2190
	2195	2200
Lys Gly Asp Ser Glu Asp Gly Ala Pro Gly Leu Pro Gly Gln Pro Gly		2205
	2210	2215
Ser Pro Gly Glu Gln Gly Pro Arg Gly Pro Pro Gly Ala Ile Gly Pro		2220
2225	2230	2235
Lys Gly Asp Arg Gly Phe Pro Gly Pro Leu Gly Glu Ala Gly Glu Lys		2240
	2245	2250
Gly Glu Arg Gly Pro Pro Gly Pro Ala Gly Ser Arg Gly Leu Pro Gly		2255
	2260	2265
Val Ala Gly Arg Pro Gly Ala Lys Gly Pro Glu Gly Pro Pro Gly Pro		2270

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2275	2280	2285
Thr Gly Arg Gln Gly Glu Lys Gly Glu Pro Gly Arg Pro Gly Asp Pro		
2290	2295	2300
Ala Val Val Gly Pro Ala Val Ala Gly Pro Lys Gly Glu Lys Gly Asp		
2305	2310	2315
Val Gly Pro Ala Gly Pro Arg Gly Ala Thr Gly Val Gln Gly Glu Arg		
2325	2330	2335
Gly Pro Pro Gly Leu Val Leu Pro Gly Asp Pro Gly Pro Lys Gly Asp		
2340	2345	2350
Pro Gly Asp Arg Gly Pro Ile Gly Leu Thr Gly Arg Ala Gly Pro Pro		
2355	2360	2365
Gly Asp Ser Gly Pro Pro Gly Glu Lys Gly Asp Pro Gly Arg Pro Gly		
2370	2375	2380
Pro Pro Gly Pro Val Gly Pro Arg Gly Arg Asp Gly Glu Val Gly Glu		
2385	2390	2395
Lys Gly Asp Glu Gly Pro Pro Gly Asp Pro Gly Leu Pro Gly Lys Ala		
2405	2410	2415
Gly Glu Arg Gly Leu Arg Gly Ala Pro Gly Val Arg Gly Pro Val Gly		
2420	2425	2430
Glu Lys Gly Asp Gln Gly Asp Pro Gly Glu Asp Gly Arg Asn Gly Ser		
2435	2440	2445
Pro Gly Ser Ser Gly Pro Lys Gly Asp Arg Gly Glu Pro Gly Pro Pro		
2450	2455	2460
Gly Pro Pro Gly Arg Leu Val Asp Thr Gly Pro Gly Ala Arg Glu Lys		
2465	2470	2475
Gly Glu Pro Gly Asp Arg Gly Gln Glu Gly Pro Arg Gly Pro Lys Gly		
2485	2490	2495
Asp Pro Gly Leu Pro Gly Ala Pro Gly Glu Arg Gly Ile Glu Gly Phe		
2500	2505	2510
Arg Gly Pro Pro Gly Pro Gln Gly Asp Pro Gly Val Arg Gly Pro Ala		
2515	2520	2525
Gly Glu Lys Gly Asp Arg Gly Pro Pro Gly Leu Asp Gly Arg Ser Gly		
2530	2535	2540
Leu Asp Gly Lys Pro Gly Ala Ala Gly Pro Ser Gly Pro Asn Gly Ala		
2545	2550	2555
Ala Gly Lys Ala Gly Asp Pro Gly Arg Asp Gly Leu Pro Gly Leu Arg		
2565	2570	2575
Gly Glu Gln Gly Leu Pro Gly Pro Ser Gly Pro Pro Gly Leu Pro Gly		
2580	2585	2590
Lys Pro Gly Glu Asp Gly Lys Pro Gly Leu Asn Gly Lys Asn Gly Glu		
2595	2600	2605
Pro Gly Asp Pro Gly Glu Asp Gly Arg Lys Gly Glu Lys Gly Asp Ser		
2610	2615	2620
Gly Ala Ser Gly Arg Glu Gly Arg Asp Gly Pro Lys Gly Glu Arg Gly		
2625	2630	2635
Ala Pro Gly Ile Leu Gly Pro Gln Gly Pro Pro Gly Leu Pro Gly Pro		
2645	2650	2655
Val Gly Pro Pro Gly Gln Gly Phe Pro Gly Val Pro Gly Gly Thr Gly		

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2660	2665	2670
Pro Lys Gly Asp Arg Gly Glu Thr Gly Ser Lys Gly Glu Gln Gly Leu		
2675	2680	2685
Pro Gly Glu Arg Gly Leu Arg Gly Glu Pro Gly Ser Val Pro Asn Val		
2690	2695	2700
Asp Arg Leu Leu Glu Thr Ala Gly Ile Lys Ala Ser Ala Leu Arg Glu		
2705	2710	2715
Ile Val Glu Thr Trp Asp Glu Ser Ser Gly Ser Phe Leu Pro Val Pro		
2725	2730	2735
Glu Arg Arg Arg Gly Pro Lys Gly Asp Ser Gly Glu Gln Gly Pro Pro		
2740	2745	2750
Gly Lys Glu Gly Pro Ile Gly Phe Pro Gly Glu Arg Gly Leu Lys Gly		
2755	2760	2765
Asp Arg Gly Asp Pro Gly Pro Gln Gly Pro Pro Gly Leu Ala Leu Gly		
2770	2775	2780
Glu Arg Gly Pro Pro Gly Pro Ser Gly Leu Ala Gly Glu Pro Gly Lys		
2785	2790	2795
Pro Gly Ile Pro Gly Leu Pro Gly Arg Ala Gly Gly Val Gly Glu Ala		
2805	2810	2815
Gly Arg Pro Gly Glu Arg Gly Glu Arg Gly Glu Lys Gly Glu Arg Gly		
2820	2825	2830
Glu Gln Gly Arg Asp Gly Pro Pro Gly Leu Pro Gly Thr Pro Gly Pro		
2835	2840	2845
Pro Gly Pro Pro Gly Pro Lys Val Ser Val Asp Glu Pro Gly Pro Gly		
2850	2855	2860
Leu Ser Gly Glu Gln Gly Pro Pro Gly Leu Lys Gly Ala Lys Gly Glu		
2865	2870	2875
Pro Gly Ser Asn Gly Asp Gln Gly Pro Lys Gly Asp Arg Gly Val Pro		
2885	2890	2895
Gly Ile Lys Gly Asp Arg Gly Glu Pro Gly Pro Arg Gly Gln Asp Gly		
2900	2905	2910
Asn Pro Gly Leu Pro Gly Glu Arg Gly Met Ala Gly Pro Glu Gly Lys		
2915	2920	2925
Pro Gly Leu Gln Gly Pro Arg Gly Pro Pro Gly Pro Val Gly Gly His		
2930	2935	2940
Gly Asp Pro Gly Pro Pro Gly Ala Pro Gly Leu Ala Gly Pro Ala Gly		
2945	2950	2955
Pro Gln Gly Pro Ser Gly Leu Lys Gly Glu Pro Gly Glu Thr Gly Pro		
2965	2970	2975
Pro Gly Arg Gly Leu Thr Gly Pro Thr Gly Ala Val Gly Leu Pro Gly		
2980	2985	2990
Pro Pro Gly Pro Ser Gly Leu Val Gly Pro Gln Gly Ser Pro Gly Leu		
2995	3000	3005
Pro Gly Gln Val Gly Glu Thr Gly Lys Pro Gly Ala Pro Gly Arg Asp		
3010	3015	3020
Gly Ala Ser Gly Lys Asp Gly Asp Arg Gly Ser Pro Gly Val Pro Gly		
3025	3030	3035
Ser Pro Gly Leu Pro Gly Pro Val Gly Pro Lys Gly Glu Pro Gly Pro		

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3045					3050					3055							
Thr	Gly	Ala	Pro	Gly	Gln	Ala	Val	Val	Gly	Leu	Pro	Gly	Ala	Lys	Gly		
3060					3065					3070							
Glu	Lys	Gly	Ala	Pro	Gly	Gly	Leu	Ala	Gly	Asp	Leu	Val	Gly	Glu	Pro		
3075					3080					3085							
Gly	Ala	Lys	Gly	Asp	Arg	Gly	Leu	Pro	Gly	Pro	Arg	Gly	Glu	Lys	Gly		
3090					3095					3100							
Glu	Ala	Gly	Arg	Ala	Gly	Glu	Pro	Gly	Asp	Pro	Gly	Glu	Asp	Gly	Gln		
3105					3110					3115					3120		
Lys	Gly	Ala	Pro	Gly	Pro	Lys	Gly	Phe	Lys	Gly	Asp	Pro	Gly	Val	Gly		
3125					3130					3135							
Val	Pro	Gly	Ser	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Val	Lys	Gly	Asp		
3140					3145					3150							
Leu	Gly	Leu	Pro	Gly	Leu	Pro	Gly	Ala	Pro	Gly	Val	Val	Gly	Phe	Pro		
3155					3160					3165							
Gly	Gln	Thr	Gly	Pro	Arg	Gly	Glu	Met	Gly	Gln	Pro	Gly	Pro	Ser	Gly		
3170					3175					3180							
Glu	Arg	Gly	Leu	Ala	Gly	Pro	Pro	Gly	Arg	Glu	Gly	Ile	Pro	Gly	Pro		
3185					3190					3195					3200		
Leu	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Ser	Val	Gly	Pro	Pro	Gly	Ala	Ser		
3205					3210					3215							
Gly	Leu	Lys	Gly	Asp	Lys	Gly	Asp	Pro	Gly	Val	Gly	Leu	Pro	Gly	Pro		
3220					3225					3230							
Arg	Gly	Glu	Arg	Gly	Glu	Pro	Gly	Ile	Arg	Gly	Glu	Asp	Gly	Arg	Pro		
3235					3240					3245							
Gly	Gln	Glu	Gly	Pro	Arg	Gly	Leu	Thr	Gly	Pro	Pro	Gly	Ser	Arg	Gly		
3250					3255					3260							
Glu	Arg	Gly	Glu	Lys	Gly	Asp	Val	Gly	Ser	Ala	Gly	Leu	Lys	Gly	Asp		
3265					3270					3275					3280		
Lys	Gly	Asp	Ser	Ala	Val	Ile	Leu	Gly	Pro	Pro	Gly	Pro	Arg	Gly	Ala		
3285					3290					3295							
Lys	Gly	Asp	Met	Gly	Glu	Arg	Gly	Pro	Arg	Gly	Leu	Asp	Gly	Asp	Lys		
3300					3305					3310							
Gly	Pro	Arg	Gly	Asp	Asn	Gly	Asp	Pro	Gly	Asp	Lys	Gly	Ser	Lys	Gly		
3315					3320					3325							
Glu	Pro	Gly	Asp	Lys	Gly	Ser	Ala	Gly	Leu	Pro	Gly	Leu	Arg	Gly	Leu		
3330					3335					3340							
Leu	Gly	Pro	Gln	Gly	Gln	Pro	Gly	Ala	Ala	Gly	Ile	Pro	Gly	Asp	Pro		
3345					3350					3355					3360		
Gly	Ser	Pro	Gly	Lys	Asp	Gly	Val	Pro	Gly	Ile	Arg	Gly	Glu	Lys	Gly		
3365					3370					3375							
Asp	Val	Gly	Phe	Met	Gly	Pro	Arg	Gly	Leu	Lys	Gly	Glu	Arg	Gly	Val		
3380					3385					3390							
Lys	Gly	Ala	Cys	Gly	Leu	Asp	Gly	Glu	Lys	Gly	Asp	Lys	Gly	Glu	Ala		
3395					3400					3405							
Gly	Pro	Pro	Gly	Arg	Pro	Gly	Leu	Ala	Gly	His	Lys	Gly	Glu	Met	Gly		
3410					3415					3420							
Glu	Pro	Gly	Val	Pro	Gly	Gln	Ser	Gly	Ala	Pro	Gly	Lys	Glu	Gly	Leu		

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3425		3430		3435		3440
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Gly Gln Pro Leu Pro Ser Glu Arg Gln Glu Val Asn Val Pro Ala Gly
275          280          285
Glu Thr Ser Val Arg Leu Arg Gly Leu Arg Pro Leu Thr Glu Tyr Gln
290          295          300
Val Thr Val Ile Ala Leu Tyr Ala Asn Ser Ile Gly Glu Ala Val Ser
305          310          315          320
Gly Thr Ala Arg Thr Thr Ala Leu Glu Gly Pro Glu Leu Thr Ile Gln
325          330          335
Asn Thr Thr Ala His Ser Leu Leu Val Ala Trp Arg Ser Val Pro Gly
340          345          350
Ala Thr Gly Tyr Arg Val Thr Trp Arg Val Leu Ser Gly Gly Pro Thr
355          360          365

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Gln	Gln	Gln	Glu	Leu	Gly	Pro	Gly	Gln	Gly	Ser	Val	Leu	Leu	Arg	Asp
370						375					380				
Leu	Glu	Pro	Gly	Thr	Asp	Tyr	Glu	Val	Thr	Val	Ser	Thr	Leu	Phe	Gly
385					390						395				400
Arg	Ser	Val	Gly	Pro	Ala	Thr	Ser	Leu	Met	Ala	Arg	Thr	Asp	Ala	Ser
				405						410				415	
Val	Glu	Gln	Thr	Leu	Arg	Pro	Val	Ile	Leu	Gly	Pro	Thr	Ser	Ile	Leu
			420					425					430		
Leu	Ser	Trp	Asn	Leu	Val	Pro	Glu	Ala	Arg	Gly	Tyr	Arg	Leu	Glu	Trp
		435					440					445			
Arg	Arg	Glu	Thr	Gly	Leu	Glu	Pro	Pro	Gln	Lys	Val	Val	Leu	Pro	Ser
		450				455					460				
Asp	Val	Thr	Arg	Tyr	Gln	Leu	Asp	Gly	Leu	Gln	Pro	Gly	Thr	Glu	Tyr
465					470					475					480
Arg	Leu	Thr	Leu	Tyr	Thr	Leu	Leu	Glu	Gly	His	Glu	Val	Ala	Thr	Pro
				485					490					495	
Ala	Thr	Val	Val	Pro	Thr	Gly	Pro	Glu	Leu	Pro	Val	Ser	Pro	Val	Thr
			500					505					510		
Asp	Leu	Gln	Ala	Thr	Glu	Leu	Pro	Gly	Gln	Arg	Val	Arg	Val	Ser	Trp
		515					520					525			
Ser	Pro	Val	Pro	Gly	Ala	Thr	Gln	Tyr	Arg	Ile	Ile	Val	Arg	Ser	Thr
		530				535					540				
Gln	Gly	Val	Glu	Arg	Thr	Leu	Val	Leu	Pro	Gly	Ser	Gln	Thr	Ala	Phe
545					550					555					560
Asp	Leu	Asp	Asp	Val	Gln	Ala	Gly	Leu	Ser	Tyr	Thr	Val	Arg	Val	Ser
				565					570					575	
Ala	Arg	Val	Gly	Pro	Arg	Glu	Gly	Ser	Ala	Ser	Val	Leu	Thr	Val	Arg
			580					585					590		
Arg	Glu	Pro	Glu	Thr	Pro	Leu	Ala	Val	Pro	Gly	Leu	Arg	Val	Val	Val
		595				600						605			
Ser	Asp	Ala	Thr	Arg	Val	Arg	Val	Ala	Trp	Gly	Pro	Val	Pro	Gly	Ala
		610				615					620				
Ser	Gly	Phe	Arg	Ile	Ser	Trp	Ser	Thr	Gly	Ser	Gly	Pro	Glu	Ser	Ser
625					630					635					640
Gln	Thr	Leu	Pro	Pro	Asp	Ser	Thr	Ala	Thr	Asp	Ile	Thr	Gly	Leu	Gln
				645					650					655	
Pro	Gly	Thr	Thr	Tyr	Gln	Val	Ala	Val	Ser	Val	Leu	Arg	Gly	Arg	Glu
			660					665					670		
Glu	Gly	Pro	Ala	Ala	Val	Ile	Val	Ala	Arg	Thr	Asp	Pro	Leu	Gly	Pro
		675					680					685			
Val	Arg	Thr	Val	His	Val	Thr	Gln	Ala	Ser	Ser	Ser	Ser	Val	Thr	Ile
		690				695					700				
Thr	Trp	Thr	Arg	Val	Pro	Gly	Ala	Thr	Gly	Tyr	Arg	Val	Ser	Trp	His
705					710					715					720
Ser	Ala	His	Gly	Pro	Glu	Lys	Ser	Gln	Leu	Val	Ser	Gly	Glu	Ala	Thr
				725					730					735	
Val	Ala	Glu	Leu	Asp	Gly	Leu	Glu	Pro	Asp	Thr	Glu	Tyr	Thr	Val	His
			740					745					750		

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Val	Arg	Ala	His	Val	Ala	Gly	Val	Asp	Gly	Pro	Pro	Ala	Ser	Val	Val
		755						760				765			
Val	Arg	Thr	Ala	Pro	Glu	Pro	Val	Gly	Arg	Val	Ser	Arg	Leu	Gln	Ile
		770						775				780			
Leu	Asn	Ala	Ser	Ser	Asp	Val	Leu	Arg	Ile	Thr	Trp	Val	Gly	Val	Thr
					790						795				800
Gly	Ala	Thr	Ala	Tyr	Arg	Leu	Ala	Trp	Gly	Arg	Ser	Glu	Gly	Gly	Pro
				805					810						815
Met	Arg	His	Gln	Ile	Leu	Pro	Gly	Asn	Thr	Asp	Ser	Ala	Glu	Ile	Arg
			820					825					830		
Gly	Leu	Glu	Gly	Gly	Val	Ser	Tyr	Ser	Val	Arg	Val	Thr	Ala	Leu	Val
		835					840					845			
Gly	Asp	Arg	Glu	Gly	Thr	Pro	Val	Ser	Ile	Val	Val	Thr	Thr	Pro	Pro
		850					855					860			
Glu	Ala	Pro	Pro	Ala	Leu	Gly	Thr	Leu	His	Val	Val	Gln	Arg	Gly	Glu
					870					875					880
His	Ser	Leu	Arg	Leu	Arg	Trp	Glu	Pro	Val	Pro	Arg	Ala	Gln	Gly	Phe
				885					890					895	
Leu	Leu	His	Trp	Gln	Pro	Glu	Gly	Gly	Gln	Glu	Gln	Ser	Arg	Val	Leu
			900					905					910		
Gly	Pro	Glu	Leu	Ser	Ser	Tyr	His	Leu	Asp	Gly	Leu	Glu	Pro	Ala	Thr
		915					920					925			
Gln	Tyr	Arg	Val	Arg	Leu	Ser	Val	Leu	Gly	Pro	Ala	Gly	Glu	Gly	Pro
		930					935				940				
Ser	Ala	Glu	Val	Thr	Ala	Arg	Thr	Glu	Ser	Pro	Arg	Val	Pro	Ser	Ile
					950					955					960
Glu	Leu	Arg	Val	Val	Asp	Thr	Ser	Ile	Asp	Ser	Val	Thr	Leu	Ala	Trp
				965					970						975
Thr	Pro	Val	Ser	Arg	Ala	Ser	Ser	Tyr	Ile	Leu	Ser	Trp	Arg	Pro	Leu
			980					985					990		
Arg	Gly	Pro	Gly	Gln	Glu	Val	Pro	Gly	Ser	Pro	Gln	Thr	Leu	Pro	Gly
		995					1000					1005			
Ile	Ser	Ser	Ser	Gln	Arg	Val	Thr	Gly	Leu	Glu	Pro	Gly	Val	Ser	Tyr
		1010					1015					1020			
Ile	Phe	Ser	Leu	Thr	Pro	Val	Leu	Asp	Gly	Val	Arg	Gly	Pro	Glu	Ala
					1030					1035					1040
Ser	Val	Thr	Gln	Thr	Pro	Val	Cys	Pro	Arg	Gly	Leu	Ala	Asp	Val	Val
				1045					1050					1055	
Phe	Leu	Pro	His	Ala	Thr	Gln	Asp	Asn	Ala	His	Arg	Ala	Glu	Ala	Thr
			1060					1065					1070		
Arg	Arg	Val	Leu	Glu	Arg	Leu	Val	Leu	Ala	Leu	Gly	Pro	Leu	Gly	Pro
		1075					1080					1085			
Gln	Ala	Val	Gln	Val	Gly	Leu	Leu	Ser	Tyr	Ser	His	Arg	Pro	Ser	Pro
		1090					1095				1100				
Leu	Phe	Pro	Leu	Asn	Gly	Ser	His	Asp	Leu	Gly	Ile	Ile	Leu	Gln	Arg
				1110					1115						1120
Ile	Arg	Asp	Met	Pro	Tyr	Met	Asp	Pro	Ser	Gly	Asn	Asn	Leu	Gly	Thr
				1125					1130					1135	

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Ala Val Val Thr Ala His Arg Tyr Met Leu Ala Pro Asp Ala Pro Gly
 1140 1145 1150
 Arg Arg Gln His Val Pro Gly Val Met Val Leu Leu Val Asp Glu Pro
 1155 1160 1165
 Leu Arg Gly Asp Ile Phe Ser Pro Ile Arg Glu Ala Gln Ala Ser Gly
 1170 1175 1180
 Leu Asn Val Val Met Leu Gly Met Ala Gly Ala Asp Pro Glu Gln Leu
 1185 1190 1195 1200
 Arg Arg Leu Ala Pro Gly Met Asp Ser Val Gln Thr Phe Phe Ala Val
 1205 1210 1215
 Asp Asp Gly Pro Ser Leu Asp Gln Ala Val Ser Gly Leu Ala Thr Ala
 1220 1225 1230
 Leu Cys Gln Ala Ser Phe Thr Thr Gln Pro Arg Pro Glu Pro Cys Pro
 1235 1240 1245
 Val Tyr Cys Pro Lys Gly Gln Lys Gly Glu Pro Gly Glu Met Gly Leu
 1250 1255 1260
 Arg Gly Gln Val Gly Pro Pro Gly Asp Pro Gly Leu Pro Gly Arg Thr
 1265 1270 1275 1280
 Gly Ala Pro Gly Pro Gln Gly Pro Pro Gly Ser Ala Thr Ala Lys Gly
 1285 1290 1295
 Glu Arg Gly Phe Pro Gly Ala Asp Gly Arg Pro Gly Ser Pro Gly Arg
 1300 1305 1310
 Ala Gly Asn Pro Gly Thr Pro Gly Ala Pro Gly Leu Lys Gly Ser Pro
 1315 1320 1325
 Gly Leu Pro Gly Pro Arg Gly Asp Pro Gly Glu Arg Gly Pro Arg Gly
 1330 1335 1340
 Pro Lys Gly Glu Pro Gly Ala Pro Gly Gln Val Ile Gly Gly Glu Gly
 1345 1350 1355 1360
 Pro Gly Leu Pro Gly Arg Lys Gly Asp Pro Gly Pro Ser Gly Pro Pro
 1365 1370 1375
 Gly Pro Arg Gly Pro Leu Gly Asp Pro Gly Pro Arg Gly Pro Pro Gly
 1380 1385 1390
 Leu Pro Gly Thr Ala Met Lys Gly Asp Lys Gly Asp Arg Gly Glu Arg
 1395 1400 1405
 Gly Pro Pro Gly Pro Gly Glu Gly Gly Ile Ala Pro Gly Glu Pro Gly
 1410 1415 1420
 Leu Pro Gly Leu Pro Gly Ser Pro Gly Pro Gln Gly Pro Val Gly Pro
 1425 1430 1435 1440
 Pro Gly Lys Lys Gly Glu Lys Gly Asp Ser Glu Asp Gly Ala Pro Gly
 1445 1450 1455
 Leu Pro Gly Gln Pro Gly Ser Pro Gly Glu Gln Gly Pro Arg Gly Pro
 1460 1465 1470
 Pro Gly Ala Ile Gly Pro Lys Gly Asp Arg Gly Phe Pro Gly Pro Leu
 1475 1480 1485
 Gly Glu Ala Gly Glu Lys Gly Glu Arg Gly Pro Pro Gly Pro Ala Gly
 1490 1495 1500
 Ser Arg Gly Leu Pro Gly Val Ala Gly Arg Pro Gly Ala Lys Gly Pro
 1505 1510 1515 1520

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Glu Gly Pro Pro Gly Pro Thr Gly Arg Gln Gly Glu Lys Gly Glu Pro
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 Gly Arg Pro Gly Asp Pro Ala Val Val Gly Pro Ala Val Ala Gly Pro
 1540 1545 1550
 Lys Gly Glu Lys Gly Asp Val Gly Pro Ala Gly Pro Arg Gly Ala Thr
 1555 1560 1565
 Gly Val Gln Gly Glu Arg Gly Pro Pro Gly Leu Val Leu Pro Gly Asp
 1570 1575 1580
 Pro Gly Pro Lys Gly Asp Pro Gly Asp Arg Gly Pro Ile Gly Leu Thr
 1585 1590 1595 1600
 Gly Arg Ala Gly Pro Pro Gly Asp Ser Gly Pro Pro Gly Glu Lys Gly
 1605 1610 1615
 Asp Pro Gly Arg Pro Gly Pro Pro Gly Pro Val Gly Pro Arg Gly Arg
 1620 1625 1630
 Asp Gly Glu Val Gly Glu Lys Gly Asp Glu Gly Pro Pro Gly Asp Pro
 1635 1640 1645
 Gly Leu Pro Gly Lys Ala Gly Glu Arg Gly Leu Arg Gly Ala Pro Gly
 1650 1655 1660
 Val Arg Gly Pro Val Gly Glu Lys Gly Asp Gln Gly Asp Pro Gly Glu
 1665 1670 1675 1680
 Asp Gly Arg Asn Gly Ser Pro Gly Ser Ser Gly Pro Lys Gly Asp Arg
 1685 1690 1695
 Gly Glu Pro Gly Pro Pro Gly Pro Pro Gly Arg Leu Val Asp Thr Gly
 1700 1705 1710
 Pro Gly Ala Arg Glu Lys Gly Glu Pro Gly Asp Arg Gly Gln Glu Gly
 1715 1720 1725
 Pro Arg Gly Pro Lys Gly Asp Pro Gly Leu Pro Gly Ala Pro Gly Glu
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 Arg Gly Ile Glu Gly Phe Arg Gly Pro Pro Gly Pro Gln Gly Asp Pro
 1745 1750 1755 1760
 Gly Val Arg Gly Pro Ala Gly Glu Lys Gly Asp Arg Gly Pro Pro Gly
 1765 1770 1775
 Leu Asp Gly Arg Ser Gly Leu Asp Gly Lys Pro Gly Ala Ala Gly Pro
 1780 1785 1790
 Ser Gly Pro Asn Gly Ala Ala Gly Lys Ala Gly Asp Pro Gly Arg Asp
 1795 1800 1805
 Gly Leu Pro Gly Leu Arg Gly Glu Gln Gly Leu Pro Gly Pro Ser Gly
 1810 1815 1820
 Pro Pro Gly Leu Pro Gly Lys Pro Gly Glu Asp Gly Lys Pro Gly Leu
 1825 1830 1835 1840
 Asn Gly Lys Asn Gly Glu Pro Gly Asp Pro Gly Glu Asp Gly Arg Lys
 1845 1850 1855
 Gly Glu Lys Gly Asp Ser Gly Ala Ser Gly Arg Glu Gly Arg Asp Gly
 1860 1865 1870
 Pro Lys Gly Glu Arg Gly Ala Pro Gly Ile Leu Gly Pro Gln Gly Pro
 1875 1880 1885
 Pro Gly Leu Pro Gly Pro Val Gly Pro Pro Gly Gln Gly Phe Pro Gly
 1890 1895 1900

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Val Pro Gly Gly Thr Gly Pro Lys Gly Asp Arg Gly Glu Thr Gly Ser
 1905 1910 1915 1920
 Lys Gly Glu Gln Gly Leu Pro Gly Glu Arg Gly Leu Arg Gly Glu Pro
 1925 1930 1935
 Gly Ser Val Pro Asn Val Asp Arg Leu Leu Glu Thr Ala Gly Ile Lys
 1940 1945 1950
 Ala Ser Ala Leu Arg Glu Ile Val Glu Thr Trp Asp Glu Ser Ser Gly
 1955 1960 1965
 Ser Phe Leu Pro Val Pro Glu Arg Arg Arg Gly Pro Lys Gly Asp Ser
 1970 1975 1980
 Gly Glu Gln Gly Pro Pro Gly Lys Glu Gly Pro Ile Gly Phe Pro Gly
 1985 1990 1995 2000
 Glu Arg Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Pro Gln Gly Pro
 2005 2010 2015
 Pro Gly Leu Ala Leu Gly Glu Arg Gly Pro Pro Gly Pro Ser Gly Leu
 2020 2025 2030
 Ala Gly Glu Pro Gly Lys Pro Gly Ile Pro Gly Leu Pro Gly Arg Ala
 2035 2040 2045
 Gly Gly Val Gly Glu Ala Gly Arg Pro Gly Glu Arg Gly Glu Arg Gly
 2050 2055 2060
 Glu Lys Gly Glu Arg Gly Glu Gln Gly Arg Asp Gly Pro Pro Gly Leu
 2065 2070 2075 2080
 Pro Gly Thr Pro Gly Pro Pro Gly Pro Pro Gly Pro Lys Val Ser Val
 2085 2090 2095
 Asp Glu Pro Gly Pro Gly Leu Ser Gly Glu Gln Gly Pro Pro Gly Leu
 2100 2105 2110
 Lys Gly Ala Lys Gly Glu Pro Gly Ser Asn Gly Asp Gln Gly Pro Lys
 2115 2120 2125
 Gly Asp Arg Gly Val Pro Gly Ile Lys Gly Asp Arg Gly Glu Pro Gly
 2130 2135 2140
 Pro Arg Gly Gln Asp Gly Asn Pro Gly Leu Pro Gly Glu Arg Gly Met
 2145 2150 2155 2160
 Ala Gly Pro Glu Gly Lys Pro Gly Leu Gln Gly Pro Arg Gly Pro Pro
 2165 2170 2175
 Gly Pro Val Gly Gly His Gly Asp Pro Gly Pro Pro Gly Ala Pro Gly
 2180 2185 2190
 Leu Ala Gly Pro Ala Gly Pro Gln Gly Pro Ser Gly Leu Lys Gly Glu
 2195 2200 2205
 Pro Gly Glu Thr Gly Pro Pro Gly Arg Gly Leu Thr Gly Pro Thr Gly
 2210 2215 2220
 Ala Val Gly Leu Pro Gly Pro Pro Gly Pro Ser Gly Leu Val Gly Pro
 2225 2230 2235 2240
 Gln Gly Ser Pro Gly Leu Pro Gly Gln Val Gly Glu Thr Gly Lys Pro
 2245 2250 2255
 Gly Ala Pro Gly Arg Asp Gly Ala Ser Gly Lys Asp Gly Asp Arg Gly
 2260 2265 2270
 Ser Pro Gly Val Pro Gly Ser Pro Gly Leu Pro Gly Pro Val Gly Pro
 2275 2280 2285

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Lys Gly Glu Pro Gly Pro Thr Gly Ala Pro Gly Gln Ala Val Val Gly
 2290 2295 2300
 Leu Pro Gly Ala Lys Gly Glu Lys Gly Ala Pro Gly Gly Leu Ala Gly
 2305 2310 2315 2320
 Asp Leu Val Gly Glu Pro Gly Ala Lys Gly Asp Arg Gly Leu Pro Gly
 2325 2330 2335
 Pro Arg Gly Glu Lys Gly Glu Ala Gly Arg Ala Gly Glu Pro Gly Asp
 2340 2345 2350
 Pro Gly Glu Asp Gly Gln Lys Gly Ala Pro Gly Pro Lys Gly Phe Lys
 2355 2360 2365
 Gly Asp Pro Gly Val Gly Val Pro Gly Ser Pro Gly Pro Pro Gly Pro
 2370 2375 2380
 Pro Gly Val Lys Gly Asp Leu Gly Leu Pro Gly Leu Pro Gly Ala Pro
 2385 2390 2395 2400
 Gly Val Val Gly Phe Pro Gly Gln Thr Gly Pro Arg Gly Glu Met Gly
 2405 2410 2415
 Gln Pro Gly Pro Ser Gly Glu Arg Gly Leu Ala Gly Pro Pro Gly Arg
 2420 2425 2430
 Glu Gly Ile Pro Gly Pro Leu Gly Pro Pro Gly Pro Pro Gly Ser Val
 2435 2440 2445
 Gly Pro Pro Gly Ala Ser Gly Leu Lys Gly Asp Lys Gly Asp Pro Gly
 2450 2455 2460
 Val Gly Leu Pro Gly Pro Arg Gly Glu Arg Gly Glu Pro Gly Ile Arg
 2465 2470 2475 2480
 Gly Glu Asp Gly Arg Pro Gly Gln Glu Gly Pro Arg Gly Leu Thr Gly
 2485 2490 2495
 Pro Pro Gly Ser Arg Gly Glu Arg Gly Glu Lys Gly Asp Val Gly Ser
 2500 2505 2510
 Ala Gly Leu Lys Gly Asp Lys Gly Asp Ser Ala Val Ile Leu Gly Pro
 2515 2520 2525
 Pro Gly Pro Arg Gly Ala Lys Gly Asp Met Gly Glu Arg Gly Pro Arg
 2530 2535 2540
 Gly Leu Asp Gly Asp Lys Gly Pro Arg Gly Asp Asn Gly Asp Pro Gly
 2545 2550 2555 2560
 Asp Lys Gly Ser Lys Gly Glu Pro Gly Asp Lys Gly Ser Ala Gly Leu
 2565 2570 2575
 Pro Gly Leu Arg Gly Leu Leu Gly Pro Gln Gly Gln Pro Gly Ala Ala
 2580 2585 2590
 Gly Ile Pro Gly Asp Pro Gly Ser Pro Gly Lys Asp Gly Val Pro Gly
 2595 2600 2605
 Ile Arg Gly Glu Lys Gly Asp Val Gly Phe Met Gly Pro Arg Gly Leu
 2610 2615 2620
 Lys Gly Glu Arg Gly Val Lys Gly Ala Cys Gly Leu Asp Gly Glu Lys
 2625 2630 2635 2640
 Gly Asp Lys Gly Glu Ala Gly Pro Pro Gly Arg Pro Gly Leu Ala Gly
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 His Lys Gly Glu Met Gly Glu Pro Gly Val Pro Gly Gln Ser Gly Ala
 2660 2665 2670

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Pro Gly Lys Glu Gly Leu Ile Gly Pro Lys Gly Asp Arg Gly Phe Asp
 2675 2680 2685
 Gly Gln Pro Gly Pro Lys Gly Asp Gln Gly Glu Lys Gly Glu Arg Gly
 2690 2695 2700
 Thr Pro Gly Ile Gly Gly Phe Pro Gly Pro Ser Gly Asn Asp Gly Ser
 2705 2710 2715 2720
 Ala Gly Pro Pro Gly Pro Pro Gly Ser Val Gly Pro Arg Gly Pro Glu
 2725 2730 2735
 Gly Leu Gln Gly Gln Lys Gly Glu Arg Gly Pro Pro Gly Glu Arg Val
 2740 2745 2750
 Val Gly Ala Pro Gly Val Pro Gly Ala Pro Gly Glu Arg Gly Glu Gln
 2755 2760 2765
 Gly Arg Pro Gly Pro Ala Gly Pro Arg Gly Glu Lys Gly Glu Ala Ala
 2770 2775 2780
 Leu Thr Glu Asp Asp Ile Arg Gly Phe Val Arg Gln Glu Met Ser Gln
 2785 2790 2795 2800
 His Cys Ala Cys Gln Gly Gln Phe Ile Ala Ser Gly Ser Arg Pro Leu
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 Pro Ser Tyr Ala Ala Asp Thr Ala Gly Ser Gln Leu His Ala Val Pro
 2820 2825 2830
 Val Leu Arg Val Ser His Ala Glu Glu Glu Glu Arg Val Pro Pro Glu
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 Asp Asp Glu Tyr Ser Glu Tyr Ser Glu Tyr Ser Val Glu Glu Tyr Gln
 2850 2855 2860
 Asp Pro Glu Ala Pro Trp Asp Ser Asp Asp Pro Cys Ser Leu Pro Leu
 2865 2870 2875 2880
 Asp Glu Gly Ser Cys Thr Ala Tyr Thr Leu Arg Trp Tyr His Arg Ala
 2885 2890 2895
 Val Thr Gly Ser Thr Glu Ala Cys His Pro Phe Val Tyr Gly Gly Cys
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 Gly Gly Asn Ala Asn Arg Phe Gly Thr Arg Glu Ala Cys Glu Arg Arg
 2915 2920 2925
 Cys Pro Pro Arg Val Val Gln Ser Gln Gly Thr Gly Thr Ala Gln Asp
 2930 2935 2940
 Gly Ser Gly Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val
 2945 2950 2955 2960
 Glu Glu Asn Pro Gly Pro Thr Ser Ser Gly Pro Gly Pro Arg Phe Leu
 2965 2970 2975
 Leu Leu Leu Pro Leu Leu Leu Pro Pro Ala Ala Ser Ala Ser Asp Arg
 2980 2985 2990
 Pro Arg Gly Arg Asp Pro Val Asn Pro Glu Lys Leu Leu Val Ile Thr
 2995 3000 3005
 Val Ala Thr Ala Glu Thr Glu Gly Tyr Leu Arg Phe Leu Arg Ser Ala
 3010 3015 3020
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 Arg Gly Gly Asp Val Ala Arg Thr Val Gly Gly Gly Gln Lys Val Arg
 3045 3050 3055

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Trp Leu Lys Lys Glu Met Glu Lys Tyr Ala Asp Arg Glu Asp Met Ile
 3060 3065 3070
 Ile Met Phe Val Asp Ser Tyr Asp Val Ile Leu Ala Gly Ser Pro Thr
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 Glu Leu Leu Lys Lys Phe Val Gln Ser Gly Ser Arg Leu Leu Phe Ser
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 Ala Glu Ser Phe Cys Trp Pro Glu Trp Gly Leu Ala Glu Gln Tyr Pro
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 Glu Val Gly Thr Gly Lys Arg Phe Leu Asn Ser Gly Gly Phe Ile Gly
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 Phe Ala Thr Thr Ile His Gln Ile Val Arg Gln Trp Lys Tyr Lys Asp
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 Asp Asp Asp Asp Gln Leu Phe Tyr Thr Arg Leu Tyr Leu Asp Pro Gly
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 Leu Arg Glu Lys Leu Ser Leu Asn Leu Asp His Lys Ser Arg Ile Phe
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 Val His Gly Asn Gly Pro Thr Lys Leu Gln Leu Asn Tyr Leu Gly Asn
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 Tyr Val Pro Asn Gly Trp Thr Pro Glu Gly Gly Cys Gly Phe Cys Asn
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 Gln Asp Arg Arg Thr Leu Pro Gly Gly Gln Pro Pro Pro Arg Val Phe
 3250 3255 3260
 Leu Ala Val Phe Val Glu Gln Pro Thr Pro Phe Leu Pro Arg Phe Leu
 3265 3270 3275 3280
 Gln Arg Leu Leu Leu Leu Asp Tyr Pro Pro Asp Arg Val Thr Leu Phe
 3285 3290 3295
 Leu His Asn Asn Glu Val Phe His Glu Pro His Ile Ala Asp Ser Trp
 3300 3305 3310
 Pro Gln Leu Gln Asp His Phe Ser Ala Val Lys Leu Val Gly Pro Glu
 3315 3320 3325
 Glu Ala Leu Ser Pro Gly Glu Ala Arg Asp Met Ala Met Asp Leu Cys
 3330 3335 3340
 Arg Gln Asp Pro Glu Cys Glu Phe Tyr Phe Ser Leu Asp Ala Asp Ala
 3345 3350 3355 3360
 Val Leu Thr Asn Leu Gln Thr Leu Arg Ile Leu Ile Glu Glu Asn Arg
 3365 3370 3375
 Lys Val Ile Ala Pro Met Leu Ser Arg His Gly Lys Leu Trp Ser Asn
 3380 3385 3390
 Phe Trp Gly Ala Leu Ser Pro Asp Glu Tyr Tyr Ala Arg Ser Glu Asp
 3395 3400 3405
 Tyr Val Glu Leu Val Gln Arg Lys Arg Val Gly Val Trp Asn Val Pro
 3410 3415 3420
 Tyr Ile Ser Gln Ala Tyr Val Ile Arg Gly Asp Thr Leu Arg Met Glu
 3425 3430 3435 3440

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Leu Pro Gln Arg Asp Val Phe Ser Gly Ser Asp Thr Asp Pro Asp Met
3445 3450 3455
Ala Phe Cys Lys Ser Phe Arg Asp Lys Gly Ile Phe Leu His Leu Ser
3460 3465 3470
Asn Gln His Glu Phe Gly Arg Leu Leu Ala Thr Ser Arg Tyr Asp Thr
3475 3480 3485
Glu His Leu His Pro Asp Leu Trp Gln Ile Phe Asp Asn Pro Val Asp
3490 3495 3500
Trp Lys Glu Gln Tyr Ile His Glu Asn Tyr Ser Arg Ala Leu Glu Gly
3505 3510 3515 3520
Glu Gly Ile Val Glu Gln Pro Cys Pro Asp Val Tyr Trp Phe Pro Leu
3525 3530 3535
Leu Ser Glu Gln Met Cys Asp Glu Leu Val Ala Glu Met Glu His Tyr
3540 3545 3550
Gly Gln Trp Ser Gly Gly Arg His Glu Asp Ser Arg Leu Ala Gly Gly
3555 3560 3565
Tyr Glu Asn Val Pro Thr Val Asp Ile His Met Lys Gln Val Gly Tyr
3570 3575 3580
Glu Asp Gln Trp Leu Gln Leu Leu Arg Thr Tyr Val Gly Pro Met Thr
3585 3590 3595 3600
Glu Ser Leu Phe Pro Gly Tyr His Thr Lys Ala Arg Ala Val Met Asn
3605 3610 3615
Phe Val Val Arg Tyr Arg Pro Asp Glu Gln Pro Ser Leu Arg Pro His
3620 3625 3630
His Asp Ser Ser Thr Phe Thr Leu Asn Val Ala Leu Asn His Lys Gly
3635 3640 3645
Leu Asp Tyr Glu Gly Gly Gly Cys Arg Phe Leu Arg Tyr Asp Cys Val
3650 3655 3660
Ile Ser Ser Pro Arg Lys Gly Trp Ala Leu Leu His Pro Gly Arg Leu
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Thr His Tyr His Glu Gly Leu Pro Thr Thr Trp Gly Thr Arg Tyr Ile
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Met Val Ser Phe Val Asp Pro
3700

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<211> 11112

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 19

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gcggcctcag cctccgaccg gccccggggc cgagaccgga tcaaccaga gaagctgctg 120
gtgatcactg tggccacagc tgaaaccgag ggggtacctgc gtttcctgcg ctctgcggag 180

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gctcgaacag	ttggtggagg	acagaaggtc	cgggtggttaa	agaaggaaat	ggagaaatac	300
gctgaccggg	aggatatgat	catcatgttt	gtggatagct	acgacgtgat	tctggccggc	360
agccccacag	agctgctgaa	gaagttcgtc	cagagtggca	gccgcctgct	cttctctgca	420
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Phe Thr Leu Asn Val Ala Leu Asn His Lys Gly Leu Asp Tyr Glu Gly					
	675		680		685
Gly Gly Cys Arg Phe Leu Arg Tyr Asp Cys Val Ile Ser Ser Pro Arg					
	690		695		700
Lys Gly Trp Ala Leu Leu His Pro Gly Arg Leu Thr His Tyr His Glu					
705		710		715	720
Gly Leu Pro Thr Thr Trp Gly Thr Arg Tyr Ile Met Val Ser Phe Val					
	725		730		735
Asp Pro Gly Ser Gly Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly					
	740		745		750
Asp Val Glu Glu Asn Pro Gly Pro Thr Leu Arg Leu Leu Val Ala Ala					

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755	760	765
Leu Cys Ala Gly Ile Leu Ala Glu Ala Pro Arg Val Arg Ala Gln His		
770	775	780
Arg Glu Arg Val Thr Cys Thr Arg Leu Tyr Ala Ala Asp Ile Val Phe		
785	790	795
Leu Leu Asp Gly Ser Ser Ser Ile Gly Arg Ser Asn Phe Arg Glu Val		
805	810	815
Arg Ser Phe Leu Glu Gly Leu Val Leu Pro Phe Ser Gly Ala Ala Ser		
820	825	830
Ala Gln Gly Val Arg Phe Ala Thr Val Gln Tyr Ser Asp Asp Pro Arg		
835	840	845
Thr Glu Phe Gly Leu Asp Ala Leu Gly Ser Gly Gly Asp Val Ile Arg		
850	855	860
Ala Ile Arg Glu Leu Ser Tyr Lys Gly Gly Asn Thr Arg Thr Gly Ala		
865	870	875
Ala Ile Leu His Val Ala Asp His Val Phe Leu Pro Gln Leu Ala Arg		
885	890	895
Pro Gly Val Pro Lys Val Cys Ile Leu Ile Thr Asp Gly Lys Ser Gln		
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Asp Leu Val Asp Thr Ala Ala Gln Arg Leu Lys Gly Gln Gly Val Lys		
915	920	925
Leu Phe Ala Val Gly Ile Lys Asn Ala Asp Pro Glu Glu Leu Lys Arg		
930	935	940
Val Ala Ser Gln Pro Thr Ser Asp Phe Phe Phe Phe Val Asn Asp Phe		
945	950	955
Ser Ile Leu Arg Thr Leu Leu Pro Leu Val Ser Arg Arg Val Cys Thr		
965	970	975
Thr Ala Gly Gly Val Pro Val Thr Arg Pro Pro Asp Asp Ser Thr Ser		
980	985	990
Ala Pro Arg Asp Leu Val Leu Ser Glu Pro Ser Ser Gln Ser Leu Arg		
995	1000	1005
Val Gln Trp Thr Ala Ala Ser Gly Pro Val Thr Gly Tyr Lys Val Gln		
1010	1015	1020
Tyr Thr Pro Leu Thr Gly Leu Gly Gln Pro Leu Pro Ser Glu Arg Gln		
1025	1030	1035
Glu Val Asn Val Pro Ala Gly Glu Thr Ser Val Arg Leu Arg Gly Leu		
1045	1050	1055
Arg Pro Leu Thr Glu Tyr Gln Val Thr Val Ile Ala Leu Tyr Ala Asn		
1060	1065	1070
Ser Ile Gly Glu Ala Val Ser Gly Thr Ala Arg Thr Thr Ala Leu Glu		
1075	1080	1085
Gly Pro Glu Leu Thr Ile Gln Asn Thr Thr Ala His Ser Leu Leu Val		
1090	1095	1100
Ala Trp Arg Ser Val Pro Gly Ala Thr Gly Tyr Arg Val Thr Trp Arg		
1105	1110	1115
Val Leu Ser Gly Gly Pro Thr Gln Gln Gln Glu Leu Gly Pro Gly Gln		
1125	1130	1135
Gly Ser Val Leu Leu Arg Asp Leu Glu Pro Gly Thr Asp Tyr Glu Val		

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Met	Ala	Arg	Thr	Asp	Ala	Ser	Val	Glu	Gln	Thr	Leu	Arg	Pro	Val	Ile
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Leu	Gly	Pro	Thr	Ser	Ile	Leu	Leu	Ser	Trp	Asn	Leu	Val	Pro	Glu	Ala
1185					1190					1195					1200
Arg	Gly	Tyr	Arg	Leu	Glu	Trp	Arg	Arg	Glu	Thr	Gly	Leu	Glu	Pro	Pro
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Gln	Lys	Val	Val	Leu	Pro	Ser	Asp	Val	Thr	Arg	Tyr	Gln	Leu	Asp	Gly
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Leu	Gln	Pro	Gly	Thr	Glu	Tyr	Arg	Leu	Thr	Leu	Tyr	Thr	Leu	Leu	Glu
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Gly	His	Glu	Val	Ala	Thr	Pro	Ala	Thr	Val	Val	Pro	Thr	Gly	Pro	Glu
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Leu	Pro	Val	Ser	Pro	Val	Thr	Asp	Leu	Gln	Ala	Thr	Glu	Leu	Pro	Gly
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Gln	Arg	Val	Arg	Val	Ser	Trp	Ser	Pro	Val	Pro	Gly	Ala	Thr	Gln	Tyr
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Arg	Ile	Ile	Val	Arg	Ser	Thr	Gln	Gly	Val	Glu	Arg	Thr	Leu	Val	Leu
			1300						1305						1310
Pro	Gly	Ser	Gln	Thr	Ala	Phe	Asp	Leu	Asp	Asp	Val	Gln	Ala	Gly	Leu
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Ser	Tyr	Thr	Val	Arg	Val	Ser	Ala	Arg	Val	Gly	Pro	Arg	Glu	Gly	Ser
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Ala	Ser	Val	Leu	Thr	Val	Arg	Arg	Glu	Pro	Glu	Thr	Pro	Leu	Ala	Val
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Pro	Gly	Leu	Arg	Val	Val	Val	Ser	Asp	Ala	Thr	Arg	Val	Arg	Val	Ala
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Trp	Gly	Pro	Val	Pro	Gly	Ala	Ser	Gly	Phe	Arg	Ile	Ser	Trp	Ser	Thr
			1380						1385						1390
Gly	Ser	Gly	Pro	Glu	Ser	Ser	Gln	Thr	Leu	Pro	Pro	Asp	Ser	Thr	Ala
			1395				1400								1405
Thr	Asp	Ile	Thr	Gly	Leu	Gln	Pro	Gly	Thr	Thr	Tyr	Gln	Val	Ala	Val
	1410					1415						1420			
Ser	Val	Leu	Arg	Gly	Arg	Glu	Glu	Gly	Pro	Ala	Ala	Val	Ile	Val	Ala
1425					1430					1435					1440
Arg	Thr	Asp	Pro	Leu	Gly	Pro	Val	Arg	Thr	Val	His	Val	Thr	Gln	Ala
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Ser	Ser	Ser	Ser	Val	Thr	Ile	Thr	Trp	Thr	Arg	Val	Pro	Gly	Ala	Thr
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Gly	Tyr	Arg	Val	Ser	Trp	His	Ser	Ala	His	Gly	Pro	Glu	Lys	Ser	Gln
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Leu	Val	Ser	Gly	Glu	Ala	Thr	Val	Ala	Glu	Leu	Asp	Gly	Leu	Glu	Pro
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Asp	Thr	Glu	Tyr	Thr	Val	His	Val	Arg	Ala	His	Val	Ala	Gly	Val	Asp
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Gly	Pro	Pro	Ala	Ser	Val	Val	Val	Arg	Thr	Ala	Pro	Glu	Pro	Val	Gly

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Arg	Val	Ser	Arg	Leu	Gln	Ile	Leu	Asn	Ala	Ser	Ser	Asp	Val	Leu	Arg
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Ile	Thr	Trp	Val	Gly	Val	Thr	Gly	Ala	Thr	Ala	Tyr	Arg	Leu	Ala	Trp
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Gly	Arg	Ser	Glu	Gly	Gly	Pro	Met	Arg	His	Gln	Ile	Leu	Pro	Gly	Asn
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Thr	Asp	Ser	Ala	Glu	Ile	Arg	Gly	Leu	Glu	Gly	Gly	Val	Ser	Tyr	Ser
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Val	Arg	Val	Thr	Ala	Leu	Val	Gly	Asp	Arg	Glu	Gly	Thr	Pro	Val	Ser
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Ile	Val	Val	Thr	Thr	Pro	Pro	Glu	Ala	Pro	Pro	Ala	Leu	Gly	Thr	Leu
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His	Val	Val	Gln	Arg	Gly	Glu	His	Ser	Leu	Arg	Leu	Arg	Trp	Glu	Pro
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Val	Pro	Arg	Ala	Gln	Gly	Phe	Leu	Leu	His	Trp	Gln	Pro	Glu	Gly	Gly
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Gln	Glu	Gln	Ser	Arg	Val	Leu	Gly	Pro	Glu	Leu	Ser	Ser	Tyr	His	Leu
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Asp	Gly	Leu	Glu	Pro	Ala	Thr	Gln	Tyr	Arg	Val	Arg	Leu	Ser	Val	Leu
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Gly	Pro	Ala	Gly	Glu	Gly	Pro	Ser	Ala	Glu	Val	Thr	Ala	Arg	Thr	Glu
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Ser	Pro	Arg	Val	Pro	Ser	Ile	Glu	Leu	Arg	Val	Val	Asp	Thr	Ser	Ile
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Asp	Ser	Val	Thr	Leu	Ala	Trp	Thr	Pro	Val	Ser	Arg	Ala	Ser	Ser	Tyr
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Ile	Leu	Ser	Trp	Arg	Pro	Leu	Arg	Gly	Pro	Gly	Gln	Glu	Val	Pro	Gly
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Ser	Pro	Gln	Thr	Leu	Pro	Gly	Ile	Ser	Ser	Ser	Gln	Arg	Val	Thr	Gly
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Leu	Glu	Pro	Gly	Val	Ser	Tyr	Ile	Phe	Ser	Leu	Thr	Pro	Val	Leu	Asp
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Gly	Val	Arg	Gly	Pro	Glu	Ala	Ser	Val	Thr	Gln	Thr	Pro	Val	Cys	Pro
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Arg	Gly	Leu	Ala	Asp	Val	Val	Phe	Leu	Pro	His	Ala	Thr	Gln	Asp	Asn
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Ala	His	Arg	Ala	Glu	Ala	Thr	Arg	Arg	Val	Leu	Glu	Arg	Leu	Val	Leu
1825			1830				1835				1840				
Ala	Leu	Gly	Pro	Leu	Gly	Pro	Gln	Ala	Val	Gln	Val	Gly	Leu	Leu	Ser
			1845				1850				1855				
Tyr	Ser	His	Arg	Pro	Ser	Pro	Leu	Phe	Pro	Leu	Asn	Gly	Ser	His	Asp
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Leu	Gly	Ile	Ile	Leu	Gln	Arg	Ile	Arg	Asp	Met	Pro	Tyr	Met	Asp	Pro
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Ser	Gly	Asn	Asn	Leu	Gly	Thr	Ala	Val	Val	Thr	Ala	His	Arg	Tyr	Met
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Leu	Ala	Pro	Asp	Ala	Pro	Gly	Arg	Arg	Gln	His	Val	Pro	Gly	Val	Met

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Val	Leu	Leu	Val	Asp	Glu	Pro	Leu	Arg	Gly	Asp	Ile	Phe	Ser	Pro	Ile			
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Arg	Glu	Ala	Gln	Ala	Ser	Gly	Leu	Asn	Val	Val	Met	Leu	Gly	Met	Ala			
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Gly	Ala	Asp	Pro	Glu	Gln	Leu	Arg	Arg	Leu	Ala	Pro	Gly	Met	Asp	Ser			
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Val	Gln	Thr	Phe	Phe	Ala	Val	Asp	Asp	Gly	Pro	Ser	Leu	Asp	Gln	Ala			
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Val	Ser	Gly	Leu	Ala	Thr	Ala	Leu	Cys	Gln	Ala	Ser	Phe	Thr	Thr	Gln			
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Pro	Arg	Pro	Glu	Pro	Cys	Pro	Val	Tyr	Cys	Pro	Lys	Gly	Gln	Lys	Gly			
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Glu	Pro	Gly	Glu	Met	Gly	Leu	Arg	Gly	Gln	Val	Gly	Pro	Pro	Gly	Asp			
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Pro	Gly	Leu	Pro	Gly	Arg	Thr	Gly	Ala	Pro	Gly	Pro	Gln	Gly	Pro	Pro			
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Gly	Ser	Ala	Thr	Ala	Lys	Gly	Glu	Arg	Gly	Phe	Pro	Gly	Ala	Asp	Gly			
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Arg	Pro	Gly	Ser	Pro	Gly	Arg	Ala	Gly	Asn	Pro	Gly	Thr	Pro	Gly	Ala			
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Pro	Gly	Leu	Lys	Gly	Ser	Pro	Gly	Leu	Pro	Gly	Pro	Arg	Gly	Asp	Pro			
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Gly	Glu	Arg	Gly	Pro	Arg	Gly	Pro	Lys	Gly	Glu	Pro	Gly	Ala	Pro	Gly			
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Gln	Val	Ile	Gly	Gly	Glu	Gly	Pro	Gly	Leu	Pro	Gly	Arg	Lys	Gly	Asp			
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Pro	Gly	Pro	Ser	Gly	Pro	Pro	Gly	Pro	Arg	Gly	Pro	Leu	Gly	Asp	Pro			
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Gly	Pro	Arg	Gly	Pro	Pro	Gly	Leu	Pro	Gly	Thr	Ala	Met	Lys	Gly	Asp			
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Lys	Gly	Asp	Arg	Gly	Glu	Arg	Gly	Pro	Pro	Gly	Pro	Gly	Glu	Gly	Gly			
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Pro	Gln	Gly	Pro	Val	Gly	Pro	Pro	Gly	Lys	Lys	Gly	Glu	Lys	Gly	Asp			
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Ser	Glu	Asp	Gly	Ala	Pro	Gly	Leu	Pro	Gly	Gln	Pro	Gly	Ser	Pro	Gly			
					2210						2215						2220	
Glu	Gln	Gly	Pro	Arg	Gly	Pro	Pro	Gly	Ala	Ile	Gly	Pro	Lys	Gly	Asp			
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Arg	Gly	Phe	Pro	Gly	Pro	Leu	Gly	Glu	Ala	Gly	Glu	Lys	Gly	Glu	Arg			
					2245						2250						2255	
Gly	Pro	Pro	Gly	Pro	Ala	Gly	Ser	Arg	Gly	Leu	Pro	Gly	Val	Ala	Gly			
					2260						2265						2270	
Arg	Pro	Gly	Ala	Lys	Gly	Pro	Glu	Gly	Pro	Pro	Gly	Pro	Thr	Gly	Arg			
					2275						2280						2285	
Gln	Gly	Glu	Lys	Gly	Glu	Pro	Gly	Arg	Pro	Gly	Asp	Pro	Ala	Val	Val			

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Ala Gly Pro Arg Gly Ala Thr Gly Val Gln Gly Glu Arg Gly Pro Pro		2320
	2325	2330
		2335
Gly Leu Val Leu Pro Gly Asp Pro Gly Pro Lys Gly Asp Pro Gly Asp		
	2340	2345
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Arg Gly Pro Ile Gly Leu Thr Gly Arg Ala Gly Pro Pro Gly Asp Ser		
	2355	2360
		2365
Gly Pro Pro Gly Glu Lys Gly Asp Pro Gly Arg Pro Gly Pro Pro Gly		
	2370	2375
		2380
Pro Val Gly Pro Arg Gly Arg Asp Gly Glu Val Gly Glu Lys Gly Asp		
	2385	2390
		2395
Glu Gly Pro Pro Gly Asp Pro Gly Leu Pro Gly Lys Ala Gly Glu Arg		
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		2415
Gly Leu Arg Gly Ala Pro Gly Val Arg Gly Pro Val Gly Glu Lys Gly		
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		2430
Asp Gln Gly Asp Pro Gly Glu Asp Gly Arg Asn Gly Ser Pro Gly Ser		
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		2445
Ser Gly Pro Lys Gly Asp Arg Gly Glu Pro Gly Pro Gly Pro Pro		
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		2460
Gly Arg Leu Val Asp Thr Gly Pro Gly Ala Arg Glu Lys Gly Glu Pro		
	2465	2470
		2475
Gly Asp Arg Gly Gln Glu Gly Pro Arg Gly Pro Lys Gly Asp Pro Gly		
	2485	2490
		2495
Leu Pro Gly Ala Pro Gly Glu Arg Gly Ile Glu Gly Phe Arg Gly Pro		
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		2510
Pro Gly Pro Gln Gly Asp Pro Gly Val Arg Gly Pro Ala Gly Glu Lys		
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		2525
Gly Asp Arg Gly Pro Pro Gly Leu Asp Gly Arg Ser Gly Leu Asp Gly		
	2530	2535
		2540
Lys Pro Gly Ala Ala Gly Pro Ser Gly Pro Asn Gly Ala Ala Gly Lys		
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		2555
Ala Gly Asp Pro Gly Arg Asp Gly Leu Pro Gly Leu Arg Gly Glu Gln		
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		2575
Gly Leu Pro Gly Pro Ser Gly Pro Pro Gly Leu Pro Gly Lys Pro Gly		
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		2590
Glu Asp Gly Lys Pro Gly Leu Asn Gly Lys Asn Gly Glu Pro Gly Asp		
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		2605
Pro Gly Glu Asp Gly Arg Lys Gly Glu Lys Gly Asp Ser Gly Ala Ser		
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		2620
Gly Arg Glu Gly Arg Asp Gly Pro Lys Gly Glu Arg Gly Ala Pro Gly		
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		2635
Ile Leu Gly Pro Gln Gly Pro Pro Gly Leu Pro Gly Pro Val Gly Pro		
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Pro Gly Gln Gly Phe Pro Gly Val Pro Gly Gly Thr Gly Pro Lys Gly		
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		2670
Asp Arg Gly Glu Thr Gly Ser Lys Gly Glu Gln Gly Leu Pro Gly Glu		

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Arg Gly Leu Arg Gly Glu Pro Gly Ser Val Pro Asn Val Asp Arg Leu		
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Leu Glu Thr Ala Gly Ile Lys Ala Ser Ala Leu Arg Glu Ile Val Glu		
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Thr Trp Asp Glu Ser Ser Gly Ser Phe Leu Pro Val Pro Glu Arg Arg		
2725	2730	2735
Arg Gly Pro Lys Gly Asp Ser Gly Glu Gln Gly Pro Pro Gly Lys Glu		
2740	2745	2750
Gly Pro Ile Gly Phe Pro Gly Glu Arg Gly Leu Lys Gly Asp Arg Gly		
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Asp Pro Gly Pro Gln Gly Pro Pro Gly Leu Ala Leu Gly Glu Arg Gly		
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Pro Pro Gly Pro Ser Gly Leu Ala Gly Glu Pro Gly Lys Pro Gly Ile		
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Pro Gly Leu Pro Gly Arg Ala Gly Gly Val Gly Glu Ala Gly Arg Pro		
2805	2810	2815
Gly Glu Arg Gly Glu Arg Gly Glu Lys Gly Glu Arg Gly Glu Gln Gly		
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Arg Asp Gly Pro Pro Gly Leu Pro Gly Thr Pro Gly Pro Gly Pro		
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Pro Gly Pro Lys Val Ser Val Asp Glu Pro Gly Pro Gly Leu Ser Gly		
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Asn Gly Asp Gln Gly Pro Lys Gly Asp Arg Gly Val Pro Gly Ile Lys		
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Gly Asp Arg Gly Glu Pro Gly Pro Arg Gly Gln Asp Gly Asn Pro Gly		
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Leu Pro Gly Glu Arg Gly Met Ala Gly Pro Glu Gly Lys Pro Gly Leu		
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Gln Gly Pro Arg Gly Pro Pro Gly Pro Val Gly Gly His Gly Asp Pro		
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Gly Pro Pro Gly Ala Pro Gly Leu Ala Gly Pro Ala Gly Pro Gln Gly		
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Pro Ser Gly Leu Lys Gly Glu Pro Gly Glu Thr Gly Pro Pro Gly Arg		
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Gly Leu Thr Gly Pro Thr Gly Ala Val Gly Leu Pro Gly Pro Pro Gly		
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Pro Ser Gly Leu Val Gly Pro Gln Gly Ser Pro Gly Leu Pro Gly Gln		
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Val Gly Glu Thr Gly Lys Pro Gly Ala Pro Gly Arg Asp Gly Ala Ser		
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Gly Lys Asp Gly Asp Arg Gly Ser Pro Gly Val Pro Gly Ser Pro Gly		
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Leu Pro Gly Pro Val Gly Pro Lys Gly Glu Pro Gly Pro Thr Gly Ala		
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Pro Gly Gln Ala Val Val Gly Leu Pro Gly Ala Lys Gly Glu Lys Gly		

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Arg Ala Gly Glu Pro Gly Asp Pro Gly Glu Asp Gly Gln Lys Gly Ala		
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Pro Gly Pro Lys Gly Phe Lys Gly Asp Pro Gly Val Gly Val Pro Gly		
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Ser Pro Gly Pro Pro Gly Pro Pro Gly Val Lys Gly Asp Leu Gly Leu		
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Pro Gly Leu Pro Gly Ala Pro Gly Val Val Gly Phe Pro Gly Gln Thr		
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Gly Pro Arg Gly Glu Met Gly Gln Pro Gly Pro Ser Gly Glu Arg Gly		
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Leu Ala Gly Pro Pro Gly Arg Glu Gly Ile Pro Gly Pro Leu Gly Pro		
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Pro Gly Pro Pro Gly Ser Val Gly Pro Pro Gly Ala Ser Gly Leu Lys		
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Gly Lys Asp Gly Val Pro Gly Ile Arg Gly Glu Lys Gly Asp Val Gly		
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Phe Met Gly Pro Arg Gly Leu Lys Gly Glu Arg Gly Val Lys Gly Ala		
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Cys Gly Leu Asp Gly Glu Lys Gly Asp Lys Gly Glu Ala Gly Pro Pro		
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Lys Gly Asp Arg Gly Phe Asp Gly Gln Pro Gly Pro Lys Gly Asp Gln		

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3505					3510					3515					3520
Pro	Gly	Glu	Arg	Gly	Glu	Gln	Gly	Arg	Pro	Gly	Pro	Ala	Gly	Pro	Arg
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Val	Arg	Gln	Glu	Met	Ser	Gln	His	Cys	Ala	Cys	Gln	Gly	Gln	Phe	Ile
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Glu	Glu	Arg	Val	Pro	Pro	Glu	Asp	Asp	Glu	Tyr	Ser	Glu	Tyr	Ser	Glu
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Tyr	Ser	Val	Glu	Glu	Tyr	Gln	Asp	Pro	Glu	Ala	Pro	Trp	Asp	Ser	Asp
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Asp	Pro	Cys	Ser	Leu	Pro	Leu	Asp	Glu	Gly	Ser	Cys	Thr	Ala	Tyr	Thr
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Leu	Arg	Trp	Tyr	His	Arg	Ala	Val	Thr	Gly	Ser	Thr	Glu	Ala	Cys	His
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<211> 11115

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 21

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ttcttactgg atggctcctc atccattggc cgcagcaatt tccgcgaggt ccgcagcttt 180
ctcgaagggc tgggtgctgcc tttctctgga gcagccagtg cacagggtgt gcgctttgcc 240

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Gly	Gln	Pro	Leu	Pro	Ser	Glu	Arg	Gln	Glu	Val	Asn	Val	Pro	Ala	Gly
	275						280				285				
Glu	Thr	Ser	Val	Arg	Leu	Arg	Gly	Leu	Arg	Pro	Leu	Thr	Glu	Tyr	Gln
	290					295				300					
Val	Thr	Val	Ile	Ala	Leu	Tyr	Ala	Asn	Ser	Ile	Gly	Glu	Ala	Val	Ser
305					310					315					320
Gly	Thr	Ala	Arg	Thr	Thr	Ala	Leu	Glu	Gly	Pro	Glu	Leu	Thr	Ile	Gln
				325					330					335	
Asn	Thr	Thr	Ala	His	Ser	Leu	Leu	Val	Ala	Trp	Arg	Ser	Val	Pro	Gly
			340					345					350		
Ala	Thr	Gly	Tyr	Arg	Val	Thr	Trp	Arg	Val	Leu	Ser	Gly	Gly	Pro	Thr
		355					360					365			
Gln	Gln	Gln	Glu	Leu	Gly	Pro	Gly	Gln	Gly	Ser	Val	Leu	Leu	Arg	Asp
	370					375					380				

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Leu Glu Pro Gly Thr Asp Tyr Glu Val Thr Val Ser Thr Leu Phe Gly
 385 390 395 400
 Arg Ser Val Gly Pro Ala Thr Ser Leu Met Ala Arg Thr Asp Ala Ser
 405 410 415
 Val Glu Gln Thr Leu Arg Pro Val Ile Leu Gly Pro Thr Ser Ile Leu
 420 425 430
 Leu Ser Trp Asn Leu Val Pro Glu Ala Arg Gly Tyr Arg Leu Glu Trp
 435 440 445
 Arg Arg Glu Thr Gly Leu Glu Pro Pro Gln Lys Val Val Leu Pro Ser
 450 455 460
 Asp Val Thr Arg Tyr Gln Leu Asp Gly Leu Gln Pro Gly Thr Glu Tyr
 465 470 475 480
 Arg Leu Thr Leu Tyr Thr Leu Leu Glu Gly His Glu Val Ala Thr Pro
 485 490 495
 Ala Thr Val Val Pro Thr Gly Pro Glu Leu Pro Val Ser Pro Val Thr
 500 505 510
 Asp Leu Gln Ala Thr Glu Leu Pro Gly Gln Arg Val Arg Val Ser Trp
 515 520 525
 Ser Pro Val Pro Gly Ala Thr Gln Tyr Arg Ile Ile Val Arg Ser Thr
 530 535 540
 Gln Gly Val Glu Arg Thr Leu Val Leu Pro Gly Ser Gln Thr Ala Phe
 545 550 555 560
 Asp Leu Asp Asp Val Gln Ala Gly Leu Ser Tyr Thr Val Arg Val Ser
 565 570 575
 Ala Arg Val Gly Pro Arg Glu Gly Ser Ala Ser Val Leu Thr Val Arg
 580 585 590
 Arg Glu Pro Glu Thr Pro Leu Ala Val Pro Gly Leu Arg Val Val Val
 595 600 605
 Ser Asp Ala Thr Arg Val Arg Val Ala Trp Gly Pro Val Pro Gly Ala
 610 615 620
 Ser Gly Phe Arg Ile Ser Trp Ser Thr Gly Ser Gly Pro Glu Ser Ser
 625 630 635 640
 Gln Thr Leu Pro Pro Asp Ser Thr Ala Thr Asp Ile Thr Gly Leu Gln
 645 650 655
 Pro Gly Thr Thr Tyr Gln Val Ala Val Ser Val Leu Arg Gly Arg Glu
 660 665 670
 Glu Gly Pro Ala Ala Val Ile Val Ala Arg Thr Asp Pro Leu Gly Pro
 675 680 685
 Val Arg Thr Val His Val Thr Gln Ala Ser Ser Ser Ser Val Thr Ile
 690 695 700
 Thr Trp Thr Arg Val Pro Gly Ala Thr Gly Tyr Arg Val Ser Trp His
 705 710 715 720
 Ser Ala His Gly Pro Glu Lys Ser Gln Leu Val Ser Gly Glu Ala Thr
 725 730 735
 Val Ala Glu Leu Asp Gly Leu Glu Pro Asp Thr Glu Tyr Thr Val His
 740 745 750
 Val Arg Ala His Val Ala Gly Val Asp Gly Pro Pro Ala Ser Val Val
 755 760 765

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Val	Arg	Thr	Ala	Pro	Glu	Pro	Val	Gly	Arg	Val	Ser	Arg	Leu	Gln	Ile
770						775					780				
Leu	Asn	Ala	Ser	Ser	Asp	Val	Leu	Arg	Ile	Thr	Trp	Val	Gly	Val	Thr
785					790					795					800
Gly	Ala	Thr	Ala	Tyr	Arg	Leu	Ala	Trp	Gly	Arg	Ser	Glu	Gly	Gly	Pro
				805					810					815	
Met	Arg	His	Gln	Ile	Leu	Pro	Gly	Asn	Thr	Asp	Ser	Ala	Glu	Ile	Arg
			820					825					830		
Gly	Leu	Glu	Gly	Gly	Val	Ser	Tyr	Ser	Val	Arg	Val	Thr	Ala	Leu	Val
		835					840					845			
Gly	Asp	Arg	Glu	Gly	Thr	Pro	Val	Ser	Ile	Val	Val	Thr	Thr	Pro	Pro
						855						860			
Glu	Ala	Pro	Pro	Ala	Leu	Gly	Thr	Leu	His	Val	Val	Gln	Arg	Gly	Glu
865					870					875					880
His	Ser	Leu	Arg	Leu	Arg	Trp	Glu	Pro	Val	Pro	Arg	Ala	Gln	Gly	Phe
				885					890					895	
Leu	Leu	His	Trp	Gln	Pro	Glu	Gly	Gly	Gln	Glu	Gln	Ser	Arg	Val	Leu
			900					905					910		
Gly	Pro	Glu	Leu	Ser	Ser	Tyr	His	Leu	Asp	Gly	Leu	Glu	Pro	Ala	Thr
		915					920					925			
Gln	Tyr	Arg	Val	Arg	Leu	Ser	Val	Leu	Gly	Pro	Ala	Gly	Glu	Gly	Pro
	930					935					940				
Ser	Ala	Glu	Val	Thr	Ala	Arg	Thr	Glu	Ser	Pro	Arg	Val	Pro	Ser	Ile
945					950					955					960
Glu	Leu	Arg	Val	Val	Asp	Thr	Ser	Ile	Asp	Ser	Val	Thr	Leu	Ala	Trp
				965					970					975	
Thr	Pro	Val	Ser	Arg	Ala	Ser	Ser	Tyr	Ile	Leu	Ser	Trp	Arg	Pro	Leu
			980					985					990		
Arg	Gly	Pro	Gly	Gln	Glu	Val	Pro	Gly	Ser	Pro	Gln	Thr	Leu	Pro	Gly
	995						1000					1005			
Ile	Ser	Ser	Ser	Gln	Arg	Val	Thr	Gly	Leu	Glu	Pro	Gly	Val	Ser	Tyr
	1010					1015					1020				
Ile	Phe	Ser	Leu	Thr	Pro	Val	Leu	Asp	Gly	Val	Arg	Gly	Pro	Glu	Ala
1025					1030					1035					1040
Ser	Val	Thr	Gln	Thr	Pro	Val	Cys	Pro	Arg	Gly	Leu	Ala	Asp	Val	Val
			1045						1050					1055	
Phe	Leu	Pro	His	Ala	Thr	Gln	Asp	Asn	Ala	His	Arg	Ala	Glu	Ala	Thr
			1060					1065					1070		
Arg	Arg	Val	Leu	Glu	Arg	Leu	Val	Leu	Ala	Leu	Gly	Pro	Leu	Gly	Pro
		1075					1080					1085			
Gln	Ala	Val	Gln	Val	Gly	Leu	Leu	Ser	Tyr	Ser	His	Arg	Pro	Ser	Pro
	1090					1095					1100				
Leu	Phe	Pro	Leu	Asn	Gly	Ser	His	Asp	Leu	Gly	Ile	Ile	Leu	Gln	Arg
1105					1110					1115					1120
Ile	Arg	Asp	Met	Pro	Tyr	Met	Asp	Pro	Ser	Gly	Asn	Asn	Leu	Gly	Thr
			1125						1130					1135	
Ala	Val	Val	Thr	Ala	His	Arg	Tyr	Met	Leu	Ala	Pro	Asp	Ala	Pro	Gly
			1140					1145					1150		

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Arg Arg Gln His Val Pro Gly Val Met Val Leu Leu Val Asp Glu Pro
 1155 1160 1165
 Leu Arg Gly Asp Ile Phe Ser Pro Ile Arg Glu Ala Gln Ala Ser Gly
 1170 1175 1180
 Leu Asn Val Val Met Leu Gly Met Ala Gly Ala Asp Pro Glu Gln Leu
 1185 1190 1195 1200
 Arg Arg Leu Ala Pro Gly Met Asp Ser Val Gln Thr Phe Phe Ala Val
 1205 1210 1215
 Asp Asp Gly Pro Ser Leu Asp Gln Ala Val Ser Gly Leu Ala Thr Ala
 1220 1225 1230
 Leu Cys Gln Ala Ser Phe Thr Thr Gln Pro Arg Pro Glu Pro Cys Pro
 1235 1240 1245
 Val Tyr Cys Pro Lys Gly Gln Lys Gly Glu Pro Gly Glu Met Gly Leu
 1250 1255 1260
 Arg Gly Gln Val Gly Pro Pro Gly Asp Pro Gly Leu Pro Gly Arg Thr
 1265 1270 1275 1280
 Gly Ala Pro Gly Pro Gln Gly Pro Pro Gly Ser Ala Thr Ala Lys Gly
 1285 1290 1295
 Glu Arg Gly Phe Pro Gly Ala Asp Gly Arg Pro Gly Ser Pro Gly Arg
 1300 1305 1310
 Ala Gly Asn Pro Gly Thr Pro Gly Ala Pro Gly Leu Lys Gly Ser Pro
 1315 1320 1325
 Gly Leu Pro Gly Pro Arg Gly Asp Pro Gly Glu Arg Gly Pro Arg Gly
 1330 1335 1340
 Pro Lys Gly Glu Pro Gly Ala Pro Gly Gln Val Ile Gly Gly Glu Gly
 1345 1350 1355 1360
 Pro Gly Leu Pro Gly Arg Lys Gly Asp Pro Gly Pro Ser Gly Pro Pro
 1365 1370 1375
 Gly Pro Arg Gly Pro Leu Gly Asp Pro Gly Pro Arg Gly Pro Pro Gly
 1380 1385 1390
 Leu Pro Gly Thr Ala Met Lys Gly Asp Lys Gly Asp Arg Gly Glu Arg
 1395 1400 1405
 Gly Pro Pro Gly Pro Gly Glu Gly Gly Ile Ala Pro Gly Glu Pro Gly
 1410 1415 1420
 Leu Pro Gly Leu Pro Gly Ser Pro Gly Pro Gln Gly Pro Val Gly Pro
 1425 1430 1435 1440
 Pro Gly Lys Lys Gly Glu Lys Gly Asp Ser Glu Asp Gly Ala Pro Gly
 1445 1450 1455
 Leu Pro Gly Gln Pro Gly Ser Pro Gly Glu Gln Gly Pro Arg Gly Pro
 1460 1465 1470
 Pro Gly Ala Ile Gly Pro Lys Gly Asp Arg Gly Phe Pro Gly Pro Leu
 1475 1480 1485
 Gly Glu Ala Gly Glu Lys Gly Glu Arg Gly Pro Pro Gly Pro Ala Gly
 1490 1495 1500
 Ser Arg Gly Leu Pro Gly Val Ala Gly Arg Pro Gly Ala Lys Gly Pro
 1505 1510 1515 1520
 Glu Gly Pro Pro Gly Pro Thr Gly Arg Gln Gly Glu Lys Gly Glu Pro
 1525 1530 1535

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Gly Arg Pro Gly Asp Pro Ala Val Val Gly Pro Ala Val Ala Gly Pro
 1540 1545 1550
 Lys Gly Glu Lys Gly Asp Val Gly Pro Ala Gly Pro Arg Gly Ala Thr
 1555 1560 1565
 Gly Val Gln Gly Glu Arg Gly Pro Pro Gly Leu Val Leu Pro Gly Asp
 1570 1575 1580
 Pro Gly Pro Lys Gly Asp Pro Gly Asp Arg Gly Pro Ile Gly Leu Thr
 1585 1590 1595 1600
 Gly Arg Ala Gly Pro Pro Gly Asp Ser Gly Pro Pro Gly Glu Lys Gly
 1605 1610 1615
 Asp Pro Gly Arg Pro Gly Pro Pro Gly Pro Val Gly Pro Arg Gly Arg
 1620 1625 1630
 Asp Gly Glu Val Gly Glu Lys Gly Asp Glu Gly Pro Pro Gly Asp Pro
 1635 1640 1645
 Gly Leu Pro Gly Lys Ala Gly Glu Arg Gly Leu Arg Gly Ala Pro Gly
 1650 1655 1660
 Val Arg Gly Pro Val Gly Glu Lys Gly Asp Gln Gly Asp Pro Gly Glu
 1665 1670 1675 1680
 Asp Gly Arg Asn Gly Ser Pro Gly Ser Ser Gly Pro Lys Gly Asp Arg
 1685 1690 1695
 Gly Glu Pro Gly Pro Pro Gly Pro Pro Gly Arg Leu Val Asp Thr Gly
 1700 1705 1710
 Pro Gly Ala Arg Glu Lys Gly Glu Pro Gly Asp Arg Gly Gln Glu Gly
 1715 1720 1725
 Pro Arg Gly Pro Lys Gly Asp Pro Gly Leu Pro Gly Ala Pro Gly Glu
 1730 1735 1740
 Arg Gly Ile Glu Gly Phe Arg Gly Pro Pro Gly Pro Gln Gly Asp Pro
 1745 1750 1755 1760
 Gly Val Arg Gly Pro Ala Gly Glu Lys Gly Asp Arg Gly Pro Pro Gly
 1765 1770 1775
 Leu Asp Gly Arg Ser Gly Leu Asp Gly Lys Pro Gly Ala Ala Gly Pro
 1780 1785 1790
 Ser Gly Pro Asn Gly Ala Ala Gly Lys Ala Gly Asp Pro Gly Arg Asp
 1795 1800 1805
 Gly Leu Pro Gly Leu Arg Gly Glu Gln Gly Leu Pro Gly Pro Ser Gly
 1810 1815 1820
 Pro Pro Gly Leu Pro Gly Lys Pro Gly Glu Asp Gly Lys Pro Gly Leu
 1825 1830 1835 1840
 Asn Gly Lys Asn Gly Glu Pro Gly Asp Pro Gly Glu Asp Gly Arg Lys
 1845 1850 1855
 Gly Glu Lys Gly Asp Ser Gly Ala Ser Gly Arg Glu Gly Arg Asp Gly
 1860 1865 1870
 Pro Lys Gly Glu Arg Gly Ala Pro Gly Ile Leu Gly Pro Gln Gly Pro
 1875 1880 1885
 Pro Gly Leu Pro Gly Pro Val Gly Pro Pro Gly Gln Gly Phe Pro Gly
 1890 1895 1900
 Val Pro Gly Gly Thr Gly Pro Lys Gly Asp Arg Gly Glu Thr Gly Ser
 1905 1910 1915 1920

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Lys Gly Glu Gln Gly Leu Pro Gly Glu Arg Gly Leu Arg Gly Glu Pro
 1925 1930 1935
 Gly Ser Val Pro Asn Val Asp Arg Leu Leu Glu Thr Ala Gly Ile Lys
 1940 1945 1950
 Ala Ser Ala Leu Arg Glu Ile Val Glu Thr Trp Asp Glu Ser Ser Gly
 1955 1960 1965
 Ser Phe Leu Pro Val Pro Glu Arg Arg Arg Gly Pro Lys Gly Asp Ser
 1970 1975 1980
 Gly Glu Gln Gly Pro Pro Gly Lys Glu Gly Pro Ile Gly Phe Pro Gly
 1985 1990 1995 2000
 Glu Arg Gly Leu Lys Gly Asp Arg Gly Asp Pro Gly Pro Gln Gly Pro
 2005 2010 2015
 Pro Gly Leu Ala Leu Gly Glu Arg Gly Pro Pro Gly Pro Ser Gly Leu
 2020 2025 2030
 Ala Gly Glu Pro Gly Lys Pro Gly Ile Pro Gly Leu Pro Gly Arg Ala
 2035 2040 2045
 Gly Gly Val Gly Glu Ala Gly Arg Pro Gly Glu Arg Gly Glu Arg Gly
 2050 2055 2060
 Glu Lys Gly Glu Arg Gly Glu Gln Gly Arg Asp Gly Pro Pro Gly Leu
 2065 2070 2075 2080
 Pro Gly Thr Pro Gly Pro Pro Gly Pro Pro Gly Pro Lys Val Ser Val
 2085 2090 2095
 Asp Glu Pro Gly Pro Gly Leu Ser Gly Glu Gln Gly Pro Pro Gly Leu
 2100 2105 2110
 Lys Gly Ala Lys Gly Glu Pro Gly Ser Asn Gly Asp Gln Gly Pro Lys
 2115 2120 2125
 Gly Asp Arg Gly Val Pro Gly Ile Lys Gly Asp Arg Gly Glu Pro Gly
 2130 2135 2140
 Pro Arg Gly Gln Asp Gly Asn Pro Gly Leu Pro Gly Glu Arg Gly Met
 2145 2150 2155 2160
 Ala Gly Pro Glu Gly Lys Pro Gly Leu Gln Gly Pro Arg Gly Pro Pro
 2165 2170 2175
 Gly Pro Val Gly Gly His Gly Asp Pro Gly Pro Pro Gly Ala Pro Gly
 2180 2185 2190
 Leu Ala Gly Pro Ala Gly Pro Gln Gly Pro Ser Gly Leu Lys Gly Glu
 2195 2200 2205
 Pro Gly Glu Thr Gly Pro Pro Gly Arg Gly Leu Thr Gly Pro Thr Gly
 2210 2215 2220
 Ala Val Gly Leu Pro Gly Pro Pro Gly Pro Ser Gly Leu Val Gly Pro
 2225 2230 2235 2240
 Gln Gly Ser Pro Gly Leu Pro Gly Gln Val Gly Glu Thr Gly Lys Pro
 2245 2250 2255
 Gly Ala Pro Gly Arg Asp Gly Ala Ser Gly Lys Asp Gly Asp Arg Gly
 2260 2265 2270
 Ser Pro Gly Val Pro Gly Ser Pro Gly Leu Pro Gly Pro Val Gly Pro
 2275 2280 2285
 Lys Gly Glu Pro Gly Pro Thr Gly Ala Pro Gly Gln Ala Val Val Gly
 2290 2295 2300

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Leu Pro Gly Ala Lys Gly Glu Lys Gly Ala Pro Gly Gly Leu Ala Gly
 2305 2310 2315 2320
 Asp Leu Val Gly Glu Pro Gly Ala Lys Gly Asp Arg Gly Leu Pro Gly
 2325 2330 2335
 Pro Arg Gly Glu Lys Gly Glu Ala Gly Arg Ala Gly Glu Pro Gly Asp
 2340 2345 2350
 Pro Gly Glu Asp Gly Gln Lys Gly Ala Pro Gly Pro Lys Gly Phe Lys
 2355 2360 2365
 Gly Asp Pro Gly Val Gly Val Pro Gly Ser Pro Gly Pro Pro Gly Pro
 2370 2375 2380
 Pro Gly Val Lys Gly Asp Leu Gly Leu Pro Gly Leu Pro Gly Ala Pro
 2385 2390 2395 2400
 Gly Val Val Gly Phe Pro Gly Gln Thr Gly Pro Arg Gly Glu Met Gly
 2405 2410 2415
 Gln Pro Gly Pro Ser Gly Glu Arg Gly Leu Ala Gly Pro Pro Gly Arg
 2420 2425 2430
 Glu Gly Ile Pro Gly Pro Leu Gly Pro Pro Gly Pro Pro Gly Ser Val
 2435 2440 2445
 Gly Pro Pro Gly Ala Ser Gly Leu Lys Gly Asp Lys Gly Asp Pro Gly
 2450 2455 2460
 Val Gly Leu Pro Gly Pro Arg Gly Glu Arg Gly Glu Pro Gly Ile Arg
 2465 2470 2475 2480
 Gly Glu Asp Gly Arg Pro Gly Gln Glu Gly Pro Arg Gly Leu Thr Gly
 2485 2490 2495
 Pro Pro Gly Ser Arg Gly Glu Arg Gly Glu Lys Gly Asp Val Gly Ser
 2500 2505 2510
 Ala Gly Leu Lys Gly Asp Lys Gly Asp Ser Ala Val Ile Leu Gly Pro
 2515 2520 2525
 Pro Gly Pro Arg Gly Ala Lys Gly Asp Met Gly Glu Arg Gly Pro Arg
 2530 2535 2540
 Gly Leu Asp Gly Asp Lys Gly Pro Arg Gly Asp Asn Gly Asp Pro Gly
 2545 2550 2555 2560
 Asp Lys Gly Ser Lys Gly Glu Pro Gly Asp Lys Gly Ser Ala Gly Leu
 2565 2570 2575
 Pro Gly Leu Arg Gly Leu Leu Gly Pro Gln Gly Gln Pro Gly Ala Ala
 2580 2585 2590
 Gly Ile Pro Gly Asp Pro Gly Ser Pro Gly Lys Asp Gly Val Pro Gly
 2595 2600 2605
 Ile Arg Gly Glu Lys Gly Asp Val Gly Phe Met Gly Pro Arg Gly Leu
 2610 2615 2620
 Lys Gly Glu Arg Gly Val Lys Gly Ala Cys Gly Leu Asp Gly Glu Lys
 2625 2630 2635 2640
 Gly Asp Lys Gly Glu Ala Gly Pro Pro Gly Arg Pro Gly Leu Ala Gly
 2645 2650 2655
 His Lys Gly Glu Met Gly Glu Pro Gly Val Pro Gly Gln Ser Gly Ala
 2660 2665 2670
 Pro Gly Lys Glu Gly Leu Ile Gly Pro Lys Gly Asp Arg Gly Phe Asp
 2675 2680 2685

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Gly Gln Pro Gly Pro Lys Gly Asp Gln Gly Glu Lys Gly Glu Arg Gly
 2690 2695 2700
 Thr Pro Gly Ile Gly Gly Phe Pro Gly Pro Ser Gly Asn Asp Gly Ser
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 Ala Gly Pro Pro Gly Pro Pro Gly Ser Val Gly Pro Arg Gly Pro Glu
 2725 2730 2735
 Gly Leu Gln Gly Gln Lys Gly Glu Arg Gly Pro Pro Gly Glu Arg Val
 2740 2745 2750
 Val Gly Ala Pro Gly Val Pro Gly Ala Pro Gly Glu Arg Gly Glu Gln
 2755 2760 2765
 Gly Arg Pro Gly Pro Ala Gly Pro Arg Gly Glu Lys Gly Glu Ala Ala
 2770 2775 2780
 Leu Thr Glu Asp Asp Ile Arg Gly Phe Val Arg Gln Glu Met Ser Gln
 2785 2790 2795 2800
 His Cys Ala Cys Gln Gly Gln Phe Ile Ala Ser Gly Ser Arg Pro Leu
 2805 2810 2815
 Pro Ser Tyr Ala Ala Asp Thr Ala Gly Ser Gln Leu His Ala Val Pro
 2820 2825 2830
 Val Leu Arg Val Ser His Ala Glu Glu Glu Arg Val Pro Pro Glu
 2835 2840 2845
 Asp Asp Glu Tyr Ser Glu Tyr Ser Glu Tyr Ser Val Glu Glu Tyr Gln
 2850 2855 2860
 Asp Pro Glu Ala Pro Trp Asp Ser Asp Asp Pro Cys Ser Leu Pro Leu
 2865 2870 2875 2880
 Asp Glu Gly Ser Cys Thr Ala Tyr Thr Leu Arg Trp Tyr His Arg Ala
 2885 2890 2895
 Val Thr Gly Ser Thr Glu Ala Cys His Pro Phe Val Tyr Gly Gly Cys
 2900 2905 2910
 Gly Gly Asn Ala Asn Arg Phe Gly Thr Arg Glu Ala Cys Glu Arg Arg
 2915 2920 2925
 Cys Pro Pro Arg Val Val Gln Ser Gln Gly Thr Gly Thr Ala Gln Asp
 2930 2935 2940
 Gly Ser Gly Gln Cys Thr Asn Tyr Ala Leu Leu Lys Leu Ala Gly Asp
 2945 2950 2955 2960
 Val Glu Ser Asn Pro Gly Pro Thr Ser Ser Gly Pro Gly Pro Arg Phe
 2965 2970 2975
 Leu Leu Leu Leu Pro Leu Leu Leu Pro Pro Ala Ala Ser Ala Ser Asp
 2980 2985 2990
 Arg Pro Arg Gly Arg Asp Pro Val Asn Pro Glu Lys Leu Leu Val Ile
 2995 3000 3005
 Thr Val Ala Thr Ala Glu Thr Glu Gly Tyr Leu Arg Phe Leu Arg Ser
 3010 3015 3020
 Ala Glu Phe Phe Asn Tyr Thr Val Arg Thr Leu Gly Leu Gly Glu Glu
 3025 3030 3035 3040
 Trp Arg Gly Gly Asp Val Ala Arg Thr Val Gly Gly Gly Gln Lys Val
 3045 3050 3055
 Arg Trp Leu Lys Lys Glu Met Glu Lys Tyr Ala Asp Arg Glu Asp Met
 3060 3065 3070

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Ile Ile Met Phe Val Asp Ser Tyr Asp Val Ile Leu Ala Gly Ser Pro
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 Thr Glu Leu Leu Lys Lys Phe Val Gln Ser Gly Ser Arg Leu Leu Phe
 3090 3095 3100
 Ser Ala Glu Ser Phe Cys Trp Pro Glu Trp Gly Leu Ala Glu Gln Tyr
 3105 3110 3115 3120
 Pro Glu Val Gly Thr Gly Lys Arg Phe Leu Asn Ser Gly Gly Phe Ile
 3125 3130 3135
 Gly Phe Ala Thr Thr Ile His Gln Ile Val Arg Gln Trp Lys Tyr Lys
 3140 3145 3150
 Asp Asp Asp Asp Asp Gln Leu Phe Tyr Thr Arg Leu Tyr Leu Asp Pro
 3155 3160 3165
 Gly Leu Arg Glu Lys Leu Ser Leu Asn Leu Asp His Lys Ser Arg Ile
 3170 3175 3180
 Phe Gln Asn Leu Asn Gly Ala Leu Asp Glu Val Val Leu Lys Phe Asp
 3185 3190 3195 3200
 Arg Asn Arg Val Arg Ile Arg Asn Val Ala Tyr Asp Thr Leu Pro Ile
 3205 3210 3215
 Val Val His Gly Asn Gly Pro Thr Lys Leu Gln Leu Asn Tyr Leu Gly
 3220 3225 3230
 Asn Tyr Val Pro Asn Gly Trp Thr Pro Glu Gly Gly Cys Gly Phe Cys
 3235 3240 3245
 Asn Gln Asp Arg Arg Thr Leu Pro Gly Gly Gln Pro Pro Pro Arg Val
 3250 3255 3260
 Phe Leu Ala Val Phe Val Glu Gln Pro Thr Pro Phe Leu Pro Arg Phe
 3265 3270 3275 3280
 Leu Gln Arg Leu Leu Leu Leu Asp Tyr Pro Pro Asp Arg Val Thr Leu
 3285 3290 3295
 Phe Leu His Asn Asn Glu Val Phe His Glu Pro His Ile Ala Asp Ser
 3300 3305 3310
 Trp Pro Gln Leu Gln Asp His Phe Ser Ala Val Lys Leu Val Gly Pro
 3315 3320 3325
 Glu Glu Ala Leu Ser Pro Gly Glu Ala Arg Asp Met Ala Met Asp Leu
 3330 3335 3340
 Cys Arg Gln Asp Pro Glu Cys Glu Phe Tyr Phe Ser Leu Asp Ala Asp
 3345 3350 3355 3360
 Ala Val Leu Thr Asn Leu Gln Thr Leu Arg Ile Leu Ile Glu Glu Asn
 3365 3370 3375
 Arg Lys Val Ile Ala Pro Met Leu Ser Arg His Gly Lys Leu Trp Ser
 3380 3385 3390
 Asn Phe Trp Gly Ala Leu Ser Pro Asp Glu Tyr Tyr Ala Arg Ser Glu
 3395 3400 3405
 Asp Tyr Val Glu Leu Val Gln Arg Lys Arg Val Gly Val Trp Asn Val
 3410 3415 3420
 Pro Tyr Ile Ser Gln Ala Tyr Val Ile Arg Gly Asp Thr Leu Arg Met
 3425 3430 3435 3440
 Glu Leu Pro Gln Arg Asp Val Phe Ser Gly Ser Asp Thr Asp Pro Asp
 3445 3450 3455

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Met Ala Phe Cys Lys Ser Phe Arg Asp Lys Gly Ile Phe Leu His Leu
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Ser Asn Gln His Glu Phe Gly Arg Leu Leu Ala Thr Ser Arg Tyr Asp
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Thr Glu His Leu His Pro Asp Leu Trp Gln Ile Phe Asp Asn Pro Val
3490 3495 3500
Asp Trp Lys Glu Gln Tyr Ile His Glu Asn Tyr Ser Arg Ala Leu Glu
3505 3510 3515 3520
Gly Glu Gly Ile Val Glu Gln Pro Cys Pro Asp Val Tyr Trp Phe Pro
3525 3530 3535
Leu Leu Ser Glu Gln Met Cys Asp Glu Leu Val Ala Glu Met Glu His
3540 3545 3550
Tyr Gly Gln Trp Ser Gly Gly Arg His Glu Asp Ser Arg Leu Ala Gly
3555 3560 3565
Gly Tyr Glu Asn Val Pro Thr Val Asp Ile His Met Lys Gln Val Gly
3570 3575 3580
Tyr Glu Asp Gln Trp Leu Gln Leu Leu Arg Thr Tyr Val Gly Pro Met
3585 3590 3595 3600
Thr Glu Ser Leu Phe Pro Gly Tyr His Thr Lys Ala Arg Ala Val Met
3605 3610 3615
Asn Phe Val Val Arg Tyr Arg Pro Asp Glu Gln Pro Ser Leu Arg Pro
3620 3625 3630
His His Asp Ser Ser Thr Phe Thr Leu Asn Val Ala Leu Asn His Lys
3635 3640 3645
Gly Leu Asp Tyr Glu Gly Gly Gly Cys Arg Phe Leu Arg Tyr Asp Cys
3650 3655 3660
Val Ile Ser Ser Pro Arg Lys Gly Trp Ala Leu Leu His Pro Gly Arg
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Leu Thr His Tyr His Glu Gly Leu Pro Thr Thr Trp Gly Thr Arg Tyr
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Ile Met Val Ser Phe Val Asp Pro
3700

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<211> 11115

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 23

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gtgatcactg tggccacagc tgaaccgag ggggtacctgc gtttcctgcg ctctgcggag 180
ttcttcaact acactgtgcg gaccctgggc ctgggagagg agtggcgagg gggatgatgtg 240
gctcgaacag ttggtggagg acagaagggtc cgggtgggttaa agaaggaaat ggagaaatac 300

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945	950	955
Phe Ser Ile Leu Arg Thr Leu Leu Pro Leu Val Ser Arg Arg Val Cys		
	965	970
Thr Thr Ala Gly Gly Val Pro Val Thr Arg Pro Pro Asp Asp Ser Thr		
	980	985
Ser Ala Pro Arg Asp Leu Val Leu Ser Glu Pro Ser Ser Gln Ser Leu		
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Arg Val Gln Trp Thr Ala Ala Ser Gly Pro Val Thr Gly Tyr Lys Val		
	1010	1015
Gln Tyr Thr Pro Leu Thr Gly Leu Gly Gln Pro Leu Pro Ser Glu Arg		
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Gln Glu Val Asn Val Pro Ala Gly Glu Thr Ser Val Arg Leu Arg Gly		
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Leu Arg Pro Leu Thr Glu Tyr Gln Val Thr Val Ile Ala Leu Tyr Ala		
	1060	1065
Asn Ser Ile Gly Glu Ala Val Ser Gly Thr Ala Arg Thr Thr Ala Leu		
	1075	1080
Glu Gly Pro Glu Leu Thr Ile Gln Asn Thr Thr Ala His Ser Leu Leu		
	1090	1095
Val Ala Trp Arg Ser Val Pro Gly Ala Thr Gly Tyr Arg Val Thr Trp		
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Arg Val Leu Ser Gly Gly Pro Thr Gln Gln Gln Glu Leu Gly Pro Gly		
	1125	1130
Gln Gly Ser Val Leu Leu Arg Asp Leu Glu Pro Gly Thr Asp Tyr Glu		
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Val Thr Val Ser Thr Leu Phe Gly Arg Ser Val Gly Pro Ala Thr Ser		

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Leu Met Ala Arg Thr Asp Ala Ser Val Glu Gln Thr Leu Arg Pro Val		
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Ile Leu Gly Pro Thr Ser Ile Leu Leu Ser Trp Asn Leu Val Pro Glu		
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Ala Arg Gly Tyr Arg Leu Glu Trp Arg Arg Glu Thr Gly Leu Glu Pro		
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Pro Gln Lys Val Val Leu Pro Ser Asp Val Thr Arg Tyr Gln Leu Asp		
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Gly Leu Gln Pro Gly Thr Glu Tyr Arg Leu Thr Leu Tyr Thr Leu Leu		
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Glu Gly His Glu Val Ala Thr Pro Ala Thr Val Val Pro Thr Gly Pro		
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Glu Leu Pro Val Ser Pro Val Thr Asp Leu Gln Ala Thr Glu Leu Pro		
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Gly Gln Arg Val Arg Val Ser Trp Ser Pro Val Pro Gly Ala Thr Gln		
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Tyr Arg Ile Ile Val Arg Ser Thr Gln Gly Val Glu Arg Thr Leu Val		
1300	1305	1310
Leu Pro Gly Ser Gln Thr Ala Phe Asp Leu Asp Asp Val Gln Ala Gly		
1315	1320	1325
Leu Ser Tyr Thr Val Arg Val Ser Ala Arg Val Gly Pro Arg Glu Gly		
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Ser Ala Ser Val Leu Thr Val Arg Arg Glu Pro Glu Thr Pro Leu Ala		
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Val Pro Gly Leu Arg Val Val Val Ser Asp Ala Thr Arg Val Arg Val		
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Ala Trp Gly Pro Val Pro Gly Ala Ser Gly Phe Arg Ile Ser Trp Ser		
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Thr Gly Ser Gly Pro Glu Ser Ser Gln Thr Leu Pro Pro Asp Ser Thr		
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Ala Thr Asp Ile Thr Gly Leu Gln Pro Gly Thr Thr Tyr Gln Val Ala		
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Val Ser Val Leu Arg Gly Arg Glu Glu Gly Pro Ala Ala Val Ile Val		
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Ala Arg Thr Asp Pro Leu Gly Pro Val Arg Thr Val His Val Thr Gln		
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Ala Ser Ser Ser Ser Val Thr Ile Thr Trp Thr Arg Val Pro Gly Ala		
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Thr Gly Tyr Arg Val Ser Trp His Ser Ala His Gly Pro Glu Lys Ser		
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Gln Leu Val Ser Gly Glu Ala Thr Val Ala Glu Leu Asp Gly Leu Glu		
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Pro Asp Thr Glu Tyr Thr Val His Val Arg Ala His Val Ala Gly Val		
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Gly Arg Val Ser Arg Leu Gln Ile Leu Asn Ala Ser Ser Asp Val Leu		

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Ser Val Arg Val Thr Ala Leu Val Gly Asp Arg Glu Gly Thr Pro Val		
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Ser Ile Val Val Thr Thr Pro Pro Glu Ala Pro Pro Ala Leu Gly Thr		
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Leu His Val Val Gln Arg Gly Glu His Ser Leu Arg Leu Arg Trp Glu		
1635	1640	1645
Pro Val Pro Arg Ala Gln Gly Phe Leu Leu His Trp Gln Pro Glu Gly		
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Gly Gln Glu Gln Ser Arg Val Leu Gly Pro Glu Leu Ser Ser Tyr His		
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Leu Asp Gly Leu Glu Pro Ala Thr Gln Tyr Arg Val Arg Leu Ser Val		
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Glu Ser Pro Arg Val Pro Ser Ile Glu Leu Arg Val Val Asp Thr Ser		
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Ile Asp Ser Val Thr Leu Ala Trp Thr Pro Val Ser Arg Ala Ser Ser		
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Pro Arg Gly Leu Ala Asp Val Val Phe Leu Pro His Ala Thr Gln Asp		
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Asn Ala His Arg Ala Glu Ala Thr Arg Arg Val Leu Glu Arg Leu Val		
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Ala Gly Ala Asp Pro Glu Gln Leu Arg Arg Leu Ala Pro Gly Met Asp					
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Ser Val Gln Thr Phe Phe Ala Val Asp Asp Gly Pro Ser Leu Asp Gln					
	1970		1975		1980
Ala Val Ser Gly Leu Ala Thr Ala Leu Cys Gln Ala Ser Phe Thr Thr					
1985		1990		1995	2000
Gln Pro Arg Pro Glu Pro Cys Pro Val Tyr Cys Pro Lys Gly Gln Lys					
	2005		2010		2015
Gly Glu Pro Gly Glu Met Gly Leu Arg Gly Gln Val Gly Pro Pro Gly					
	2020		2025		2030
Asp Pro Gly Leu Pro Gly Arg Thr Gly Ala Pro Gly Pro Gln Gly Pro					
	2035		2040		2045
Pro Gly Ser Ala Thr Ala Lys Gly Glu Arg Gly Phe Pro Gly Ala Asp					
	2050		2055		2060
Gly Arg Pro Gly Ser Pro Gly Arg Ala Gly Asn Pro Gly Thr Pro Gly					
2065		2070		2075	2080
Ala Pro Gly Leu Lys Gly Ser Pro Gly Leu Pro Gly Pro Arg Gly Asp					
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Gly Gln Val Ile Gly Gly Glu Gly Pro Gly Leu Pro Gly Arg Lys Gly					
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Asp Pro Gly Pro Ser Gly Pro Pro Gly Pro Arg Gly Pro Leu Gly Asp					
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Pro Gly Pro Arg Gly Pro Pro Gly Leu Pro Gly Thr Ala Met Lys Gly					
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Asp Lys Gly Asp Arg Gly Glu Arg Gly Pro Pro Gly Pro Gly Glu Gly					
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Gly Ile Ala Pro Gly Glu Pro Gly Leu Pro Gly Leu Pro Gly Ser Pro					
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Gly Pro Gln Gly Pro Val Gly Pro Pro Gly Lys Lys Gly Glu Lys Gly					
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Asp Ser Glu Asp Gly Ala Pro Gly Leu Pro Gly Gln Pro Gly Ser Pro					
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Gly Glu Gln Gly Pro Arg Gly Pro Pro Gly Ala Ile Gly Pro Lys Gly					
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 2355 2360 2365
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 Gly Pro Val Gly Pro Arg Gly Arg Asp Gly Glu Val Gly Glu Lys Gly
 2385 2390 2395 2400
 Asp Glu Gly Pro Pro Gly Asp Pro Gly Leu Pro Gly Lys Ala Gly Glu
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 Arg Gly Leu Arg Gly Ala Pro Gly Val Arg Gly Pro Val Gly Glu Lys
 2420 2425 2430
 Gly Asp Gln Gly Asp Pro Gly Glu Asp Gly Arg Asn Gly Ser Pro Gly
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 Pro Gly Asp Arg Gly Gln Glu Gly Pro Arg Gly Pro Lys Gly Asp Pro
 2485 2490 2495
 Gly Leu Pro Gly Ala Pro Gly Glu Arg Gly Ile Glu Gly Phe Arg Gly
 2500 2505 2510
 Pro Pro Gly Pro Gln Gly Asp Pro Gly Val Arg Gly Pro Ala Gly Glu
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Glu Thr Trp Asp Glu Ser Ser Gly Ser Phe Leu Pro Val Pro Glu Arg		2720
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	2740	2745
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	2755	2760
Gly Asp Pro Gly Pro Gln Gly Pro Pro Gly Leu Ala Leu Gly Glu Arg		2765
	2770	2775
Gly Pro Pro Gly Pro Ser Gly Leu Ala Gly Glu Pro Gly Lys Pro Gly		2780
2785	2790	2795
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	2805	2810
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	2820	2825
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	2835	2840
Pro Pro Gly Pro Lys Val Ser Val Asp Glu Pro Gly Pro Gly Leu Ser		2845
	2850	2855
Gly Glu Gln Gly Pro Pro Gly Leu Lys Gly Ala Lys Gly Glu Pro Gly		2860
2865	2870	2875
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Lys Gly Asp Arg Gly Glu Pro Gly Pro Arg Gly Gln Asp Gly Asn Pro		2895
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Leu Gln Gly Pro Arg Gly Pro Pro Gly Pro Val Gly Gly His Gly Asp		2925
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Pro Gly Pro Pro Gly Ala Pro Gly Leu Ala Gly Pro Ala Gly Pro Gln		2940
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	2965	2970
Arg Gly Leu Thr Gly Pro Thr Gly Ala Val Gly Leu Pro Gly Pro Pro		2975
	2980	2985
Gly Pro Ser Gly Leu Val Gly Pro Gln Gly Ser Pro Gly Leu Pro Gly		2990
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Gln Val Gly Glu Thr Gly Lys Pro Gly Ala Pro Gly Arg Asp Gly Ala		3005
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Gly Ser Pro Gly Pro Pro Gly Pro Pro Gly Val Lys Gly Asp Leu Gly		
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Leu Pro Gly Leu Pro Gly Ala Pro Gly Val Val Gly Phe Pro Gly Gln		
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Thr Gly Pro Arg Gly Glu Met Gly Gln Pro Gly Pro Ser Gly Glu Arg		
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Gly Leu Ala Gly Pro Pro Gly Arg Glu Gly Ile Pro Gly Pro Leu Gly		
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Lys Gly Asp Lys Gly Asp Pro Gly Val Gly Leu Pro Gly Pro Arg Gly		
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Glu Arg Gly Glu Pro Gly Ile Arg Gly Glu Asp Gly Arg Pro Gly Gln		
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Glu Gly Pro Arg Gly Leu Thr Gly Pro Pro Gly Ser Arg Gly Glu Arg		
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Asp Ser Ala Val Ile Leu Gly Pro Pro Gly Pro Arg Gly Ala Lys Gly		
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Asp Met Gly Glu Arg Gly Pro Arg Gly Leu Asp Gly Asp Lys Gly Pro		
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Arg Gly Asp Asn Gly Asp Pro Gly Asp Lys Gly Ser Lys Gly Glu Pro		
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Gly Asp Lys Gly Ser Ala Gly Leu Pro Gly Leu Arg Gly Leu Leu Gly		
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Pro Gln Gly Gln Pro Gly Ala Ala Gly Ile Pro Gly Asp Pro Gly Ser		
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Pro Gly Lys Asp Gly Val Pro Gly Ile Arg Gly Glu Lys Gly Asp Val		
3365	3370	3375
Gly Phe Met Gly Pro Arg Gly Leu Lys Gly Glu Arg Gly Val Lys Gly		
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Ala Cys Gly Leu Asp Gly Glu Lys Gly Asp Lys Gly Glu Ala Gly Pro		
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Gly Val Pro Gly Gln Ser Gly Ala Pro Gly Lys Glu Gly Leu Ile Gly		
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Pro Lys Gly Asp Arg Gly Phe Asp Gly Gln Pro Gly Pro Lys Gly Asp		
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Gln Gly Glu Lys Gly Glu Arg Gly Thr Pro Gly Ile Gly Gly Phe Pro		

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Arg Gly Pro Pro Gly Glu Arg Val Val Gly Ala Pro Gly Val Pro Gly		
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Ala Pro Gly Glu Arg Gly Glu Gln Gly Arg Pro Gly Pro Ala Gly Pro		
3525	3530	3535
Arg Gly Glu Lys Gly Glu Ala Ala Leu Thr Glu Asp Asp Ile Arg Gly		
3540	3545	3550
Phe Val Arg Gln Glu Met Ser Gln His Cys Ala Cys Gln Gly Gln Phe		
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Ile Ala Ser Gly Ser Arg Pro Leu Pro Ser Tyr Ala Ala Asp Thr Ala		
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Gly Ser Gln Leu His Ala Val Pro Val Leu Arg Val Ser His Ala Glu		
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Glu Glu Glu Arg Val Pro Pro Glu Asp Asp Glu Tyr Ser Glu Tyr Ser		
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Glu Tyr Ser Val Glu Glu Tyr Gln Asp Pro Glu Ala Pro Trp Asp Ser		
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Asp Asp Pro Cys Ser Leu Pro Leu Asp Glu Gly Ser Cys Thr Ala Tyr		
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Thr	Glu	Gly	Tyr	Leu	Arg	Phe	Leu	Arg	Ser	Ala	Glu	Phe	Phe	Asn	Tyr
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Thr	Val	Arg	Thr	Leu	Gly	Leu	Gly	Glu	Glu	Trp	Arg	Gly	Gly	Asp	Val
65				70				75				80			
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Met	Glu	Lys	Tyr	Ala	Asp	Arg	Glu	Asp	Met	Ile	Ile	Met	Phe	Val	Asp
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Lys	Arg	Phe	Leu	Asn	Ser	Gly	Gly	Phe	Ile	Gly	Phe	Ala	Thr	Thr	Ile
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His	Gln	Ile	Val	Arg	Gln	Trp	Lys	Tyr	Lys	Asp	Asp	Asp	Asp	Asp	Gln
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His	Phe	Ser	Ala	Val	Lys	Leu	Val	Gly	Pro	Glu	Glu	Ala	Leu	Ser	Pro
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Gly	Glu	Ala	Arg	Asp	Met	Ala	Met	Asp	Leu	Cys	Arg	Gln	Asp	Pro	Glu
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Cys	Glu	Phe	Tyr	Phe	Ser	Leu	Asp	Ala	Asp	Ala	Val	Leu	Thr	Asn	Leu
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Gln	Thr	Leu	Arg	Ile	Leu	Ile	Glu	Glu	Asn	Arg	Lys	Val	Ile	Ala	Pro

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Ser	Pro	Asp	Glu	Tyr	Tyr	Ala	Arg	Ser	Glu	Asp	Tyr	Val	Glu	Leu	Val		
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Gln	Arg	Lys	Arg	Val	Gly	Val	Trp	Asn	Val	Pro	Tyr	Ile	Ser	Gln	Ala		
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Thr Gly Ala Ala Ile Leu His Val Ala Asp His Val Phe Leu Pro Gln
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1845	1850	1855
Leu Leu Ser Tyr Ser His Arg Pro Ser Pro Leu Phe Pro Leu Asn Gly		
1860	1865	1870
Ser His Asp Leu Gly Ile Ile Leu Gln Arg Ile Arg Asp Met Pro Tyr		
1875	1880	1885
Met Asp Pro Ser Gly Asn Asn Leu Gly Thr Ala Val Val Thr Ala His		
1890	1895	1900
Arg Tyr Met Leu Ala Pro Asp Ala Pro Gly Arg Arg Gln His Val Pro		
1905	1910	1915
Gly Val Met Val Leu Leu Val Asp Glu Pro Leu Arg Gly Asp Ile Phe		1920
1925	1930	1935
Ser Pro Ile Arg Glu Ala Gln Ala Ser Gly Leu Asn Val Val Met Leu		

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	1940		1945		1950
Gly Met Ala Gly Ala Asp Pro Glu Gln Leu Arg Arg Leu Ala Pro Gly					
	1955		1960		1965
Met Asp Ser Val Gln Thr Phe Phe Ala Val Asp Asp Gly Pro Ser Leu					
	1970		1975		1980
Asp Gln Ala Val Ser Gly Leu Ala Thr Ala Leu Cys Gln Ala Ser Phe					
1985		1990		1995	2000
Thr Thr Gln Pro Arg Pro Glu Pro Cys Pro Val Tyr Cys Pro Lys Gly					
	2005		2010		2015
Gln Lys Gly Glu Pro Gly Glu Met Gly Leu Arg Gly Gln Val Gly Pro					
	2020		2025		2030
Pro Gly Asp Pro Gly Leu Pro Gly Arg Thr Gly Ala Pro Gly Pro Gln					
	2035		2040		2045
Gly Pro Pro Gly Ser Ala Thr Ala Lys Gly Glu Arg Gly Phe Pro Gly					
	2050		2055		2060
Ala Asp Gly Arg Pro Gly Ser Pro Gly Arg Ala Gly Asn Pro Gly Thr					
2065		2070		2075	2080
Pro Gly Ala Pro Gly Leu Lys Gly Ser Pro Gly Leu Pro Gly Pro Arg					
	2085		2090		2095
Gly Asp Pro Gly Glu Arg Gly Pro Arg Gly Pro Lys Gly Glu Pro Gly					
	2100		2105		2110
Ala Pro Gly Gln Val Ile Gly Gly Glu Gly Pro Gly Leu Pro Gly Arg					
	2115		2120		2125
Lys Gly Asp Pro Gly Pro Ser Gly Pro Pro Gly Pro Arg Gly Pro Leu					
	2130		2135		2140
Gly Asp Pro Gly Pro Arg Gly Pro Pro Gly Leu Pro Gly Thr Ala Met					
2145		2150		2155	2160
Lys Gly Asp Lys Gly Asp Arg Gly Glu Arg Gly Pro Pro Gly Pro Gly					
	2165		2170		2175
Glu Gly Gly Ile Ala Pro Gly Glu Pro Gly Leu Pro Gly Leu Pro Gly					
	2180		2185		2190
Ser Pro Gly Pro Gln Gly Pro Val Gly Pro Pro Gly Lys Lys Gly Glu					
	2195		2200		2205
Lys Gly Asp Ser Glu Asp Gly Ala Pro Gly Leu Pro Gly Gln Pro Gly					
	2210		2215		2220
Ser Pro Gly Glu Gln Gly Pro Arg Gly Pro Pro Gly Ala Ile Gly Pro					
2225		2230		2235	2240
Lys Gly Asp Arg Gly Phe Pro Gly Pro Leu Gly Glu Ala Gly Glu Lys					
	2245		2250		2255
Gly Glu Arg Gly Pro Pro Gly Pro Ala Gly Ser Arg Gly Leu Pro Gly					
	2260		2265		2270
Val Ala Gly Arg Pro Gly Ala Lys Gly Pro Glu Gly Pro Pro Gly Pro					
	2275		2280		2285
Thr Gly Arg Gln Gly Glu Lys Gly Glu Pro Gly Arg Pro Gly Asp Pro					
	2290		2295		2300
Ala Val Val Gly Pro Ala Val Ala Gly Pro Lys Gly Glu Lys Gly Asp					
2305		2310		2315	2320
Val Gly Pro Ala Gly Pro Arg Gly Ala Thr Gly Val Gln Gly Glu Arg					

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	2325		2330		2335
Gly Pro Pro Gly Leu Val Leu Pro Gly Asp Pro Gly Pro Lys Gly Asp					
	2340		2345		2350
Pro Gly Asp Arg Gly Pro Ile Gly Leu Thr Gly Arg Ala Gly Pro Pro					
	2355		2360		2365
Gly Asp Ser Gly Pro Pro Gly Glu Lys Gly Asp Pro Gly Arg Pro Gly					
	2370		2375		2380
Pro Pro Gly Pro Val Gly Pro Arg Gly Arg Asp Gly Glu Val Gly Glu					
2385	2390		2395		2400
Lys Gly Asp Glu Gly Pro Pro Gly Asp Pro Gly Leu Pro Gly Lys Ala					
	2405		2410		2415
Gly Glu Arg Gly Leu Arg Gly Ala Pro Gly Val Arg Gly Pro Val Gly					
	2420		2425		2430
Glu Lys Gly Asp Gln Gly Asp Pro Gly Glu Asp Gly Arg Asn Gly Ser					
	2435		2440		2445
Pro Gly Ser Ser Gly Pro Lys Gly Asp Arg Gly Glu Pro Gly Pro Pro					
	2450		2455		2460
Gly Pro Pro Gly Arg Leu Val Asp Thr Gly Pro Gly Ala Arg Glu Lys					
2465	2470		2475		2480
Gly Glu Pro Gly Asp Arg Gly Gln Glu Gly Pro Arg Gly Pro Lys Gly					
	2485		2490		2495
Asp Pro Gly Leu Pro Gly Ala Pro Gly Glu Arg Gly Ile Glu Gly Phe					
	2500		2505		2510
Arg Gly Pro Pro Gly Pro Gln Gly Asp Pro Gly Val Arg Gly Pro Ala					
	2515		2520		2525
Gly Glu Lys Gly Asp Arg Gly Pro Pro Gly Leu Asp Gly Arg Ser Gly					
	2530		2535		2540
Leu Asp Gly Lys Pro Gly Ala Ala Gly Pro Ser Gly Pro Asn Gly Ala					
2545	2550		2555		2560
Ala Gly Lys Ala Gly Asp Pro Gly Arg Asp Gly Leu Pro Gly Leu Arg					
	2565		2570		2575
Gly Glu Gln Gly Leu Pro Gly Pro Ser Gly Pro Pro Gly Leu Pro Gly					
	2580		2585		2590
Lys Pro Gly Glu Asp Gly Lys Pro Gly Leu Asn Gly Lys Asn Gly Glu					
	2595		2600		2605
Pro Gly Asp Pro Gly Glu Asp Gly Arg Lys Gly Glu Lys Gly Asp Ser					
	2610		2615		2620
Gly Ala Ser Gly Arg Glu Gly Arg Asp Gly Pro Lys Gly Glu Arg Gly					
2625	2630		2635		2640
Ala Pro Gly Ile Leu Gly Pro Gln Gly Pro Pro Gly Leu Pro Gly Pro					
	2645		2650		2655
Val Gly Pro Pro Gly Gln Gly Phe Pro Gly Val Pro Gly Gly Thr Gly					
	2660		2665		2670
Pro Lys Gly Asp Arg Gly Glu Thr Gly Ser Lys Gly Glu Gln Gly Leu					
	2675		2680		2685
Pro Gly Glu Arg Gly Leu Arg Gly Glu Pro Gly Ser Val Pro Asn Val					
	2690		2695		2700
Asp Arg Leu Leu Glu Thr Ala Gly Ile Lys Ala Ser Ala Leu Arg Glu					

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2705          2710          2715          2720
Ile Val Glu Thr Trp Asp Glu Ser Ser Gly Ser Phe Leu Pro Val Pro
          2725          2730          2735
Glu Arg Arg Arg Gly Pro Lys Gly Asp Ser Gly Glu Gln Gly Pro Pro
          2740          2745          2750
Gly Lys Glu Gly Pro Ile Gly Phe Pro Gly Glu Arg Gly Leu Lys Gly
          2755          2760          2765
Asp Arg Gly Asp Pro Gly Pro Gln Gly Pro Pro Gly Leu Ala Leu Gly
          2770          2775          2780
Glu Arg Gly Pro Pro Gly Pro Ser Gly Leu Ala Gly Glu Pro Gly Lys
2785          2790          2795          2800
Pro Gly Ile Pro Gly Leu Pro Gly Arg Ala Gly Gly Val Gly Glu Ala
          2805          2810          2815
Gly Arg Pro Gly Glu Arg Gly Glu Arg Gly Glu Lys Gly Glu Arg Gly
          2820          2825          2830
Glu Gln Gly Arg Asp Gly Pro Pro Gly Leu Pro Gly Thr Pro Gly Pro
          2835          2840          2845
Pro Gly Pro Pro Gly Pro Lys Val Ser Val Asp Glu Pro Gly Pro Gly
          2850          2855          2860
Leu Ser Gly Glu Gln Gly Pro Pro Gly Leu Lys Gly Ala Lys Gly Glu
2865          2870          2875          2880
Pro Gly Ser Asn Gly Asp Gln Gly Pro Lys Gly Asp Arg Gly Val Pro
          2885          2890          2895
Gly Ile Lys Gly Asp Arg Gly Glu Pro Gly Pro Arg Gly Gln Asp Gly
          2900          2905          2910
Asn Pro Gly Leu Pro Gly Glu Arg Gly Met Ala Gly Pro Glu Gly Lys
          2915          2920          2925
Pro Gly Leu Gln Gly Pro Arg Gly Pro Pro Gly Pro Val Gly Gly His
          2930          2935          2940
Gly Asp Pro Gly Pro Pro Gly Ala Pro Gly Leu Ala Gly Pro Ala Gly
2945          2950          2955          2960
Pro Gln Gly Pro Ser Gly Leu Lys Gly Glu Pro Gly Glu Thr Gly Pro
          2965          2970          2975
Pro Gly Arg Gly Leu Thr Gly Pro Thr Gly Ala Val Gly Leu Pro Gly
          2980          2985          2990
Pro Pro Gly Pro Ser Gly Leu Val Gly Pro Gln Gly Ser Pro Gly Leu
          2995          3000          3005
Pro Gly Gln Val Gly Glu Thr Gly Lys Pro Gly Ala Pro Gly Arg Asp
          3010          3015          3020
Gly Ala Ser Gly Lys Asp Gly Asp Arg Gly Ser Pro Gly Val Pro Gly
3025          3030          3035          3040
Ser Pro Gly Leu Pro Gly Pro Val Gly Pro Lys Gly Glu Pro Gly Pro
          3045          3050          3055
Thr Gly Ala Pro Gly Gln Ala Val Val Gly Leu Pro Gly Ala Lys Gly
          3060          3065          3070
Glu Lys Gly Ala Pro Gly Gly Leu Ala Gly Asp Leu Val Gly Glu Pro
          3075          3080          3085
Gly Ala Lys Gly Asp Arg Gly Leu Pro Gly Pro Arg Gly Glu Lys Gly

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3090	3095	3100
Glu Ala Gly Arg Ala Gly Glu Pro Gly Asp Pro Gly Glu Asp Gly Gln		
3105	3110	3115
Lys Gly Ala Pro Gly Pro Lys Gly Phe Lys Gly Asp Pro Gly Val Gly		3120
	3125	3130
Val Pro Gly Ser Pro Gly Pro Pro Gly Pro Pro Gly Val Lys Gly Asp		3135
	3140	3145
Leu Gly Leu Pro Gly Leu Pro Gly Ala Pro Gly Val Val Gly Phe Pro		3150
	3155	3160
Gly Gln Thr Gly Pro Arg Gly Glu Met Gly Gln Pro Gly Pro Ser Gly		3165
	3170	3175
Glu Arg Gly Leu Ala Gly Pro Pro Gly Arg Glu Gly Ile Pro Gly Pro		3180
3185	3190	3195
Leu Gly Pro Pro Gly Pro Pro Gly Ser Val Gly Pro Pro Gly Ala Ser		3200
	3205	3210
Gly Leu Lys Gly Asp Lys Gly Asp Pro Gly Val Gly Leu Pro Gly Pro		3215
	3220	3225
Arg Gly Glu Arg Gly Glu Pro Gly Ile Arg Gly Glu Asp Gly Arg Pro		3230
	3235	3240
Gly Gln Glu Gly Pro Arg Gly Leu Thr Gly Pro Pro Gly Ser Arg Gly		3245
	3250	3255
Glu Arg Gly Glu Lys Gly Asp Val Gly Ser Ala Gly Leu Lys Gly Asp		3260
3265	3270	3275
Lys Gly Asp Ser Ala Val Ile Leu Gly Pro Pro Gly Pro Arg Gly Ala		3280
	3285	3290
Lys Gly Asp Met Gly Glu Arg Gly Pro Arg Gly Leu Asp Gly Asp Lys		3295
	3300	3305
Gly Pro Arg Gly Asp Asn Gly Asp Pro Gly Asp Lys Gly Ser Lys Gly		3310
	3315	3320
Glu Pro Gly Asp Lys Gly Ser Ala Gly Leu Pro Gly Leu Arg Gly Leu		3325
	3330	3335
Leu Gly Pro Gln Gly Gln Pro Gly Ala Ala Gly Ile Pro Gly Asp Pro		3340
3345	3350	3355
Gly Ser Pro Gly Lys Asp Gly Val Pro Gly Ile Arg Gly Glu Lys Gly		3360
	3365	3370
Asp Val Gly Phe Met Gly Pro Arg Gly Leu Lys Gly Glu Arg Gly Val		3375
	3380	3385
Lys Gly Ala Cys Gly Leu Asp Gly Glu Lys Gly Asp Lys Gly Glu Ala		3390
	3395	3400
Gly Pro Pro Gly Arg Pro Gly Leu Ala Gly His Lys Gly Glu Met Gly		3405
	3410	3415
Glu Pro Gly Val Pro Gly Gln Ser Gly Ala Pro Gly Lys Glu Gly Leu		3420
3425	3430	3435
Ile Gly Pro Lys Gly Asp Arg Gly Phe Asp Gly Gln Pro Gly Pro Lys		3440
	3445	3450
Gly Asp Gln Gly Glu Lys Gly Glu Arg Gly Thr Pro Gly Ile Gly Gly		3455
	3460	3465
Phe Pro Gly Pro Ser Gly Asn Asp Gly Ser Ala Gly Pro Pro Gly Pro		3470

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3475	3480	3485
Pro Gly Ser Val Gly Pro Arg Gly Pro Glu Gly Leu Gln Gly Gln Lys		
3490	3495	3500
Gly Glu Arg Gly Pro Pro Gly Glu Arg Val Val Gly Ala Pro Gly Val		
3505	3510	3515
Pro Gly Ala Pro Gly Glu Arg Gly Glu Gln Gly Arg Pro Gly Pro Ala		
3525	3530	3535
Gly Pro Arg Gly Glu Lys Gly Glu Ala Ala Leu Thr Glu Asp Asp Ile		
3540	3545	3550
Arg Gly Phe Val Arg Gln Glu Met Ser Gln His Cys Ala Cys Gln Gly		
3555	3560	3565
Gln Phe Ile Ala Ser Gly Ser Arg Pro Leu Pro Ser Tyr Ala Ala Asp		
3570	3575	3580
Thr Ala Gly Ser Gln Leu His Ala Val Pro Val Leu Arg Val Ser His		
3585	3590	3595
Ala Glu Glu Glu Glu Arg Val Pro Pro Glu Asp Asp Glu Tyr Ser Glu		
3605	3610	3615
Tyr Ser Glu Tyr Ser Val Glu Glu Tyr Gln Asp Pro Glu Ala Pro Trp		
3620	3625	3630
Asp Ser Asp Asp Pro Cys Ser Leu Pro Leu Asp Glu Gly Ser Cys Thr		
3635	3640	3645
Ala Tyr Thr Leu Arg Trp Tyr His Arg Ala Val Thr Gly Ser Thr Glu		
3650	3655	3660
Ala Cys His Pro Phe Val Tyr Gly Gly Cys Gly Gly Asn Ala Asn Arg		
3665	3670	3675
Phe Gly Thr Arg Glu Ala Cys Glu Arg Arg Cys Pro Pro Arg Val Val		
3685	3690	3695
Gln Ser Gln Gly Thr Gly Thr Ala Gln Asp		
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<212> DNA

<213> Homo sapiens

<400> 29

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tacagctttg gctctggtgg tggctatggc agcagctttg ggggtgttga tgggctgctg 240
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<211> 432

<212> PRT

<213> Homo sapiens

<400> 30

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

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