

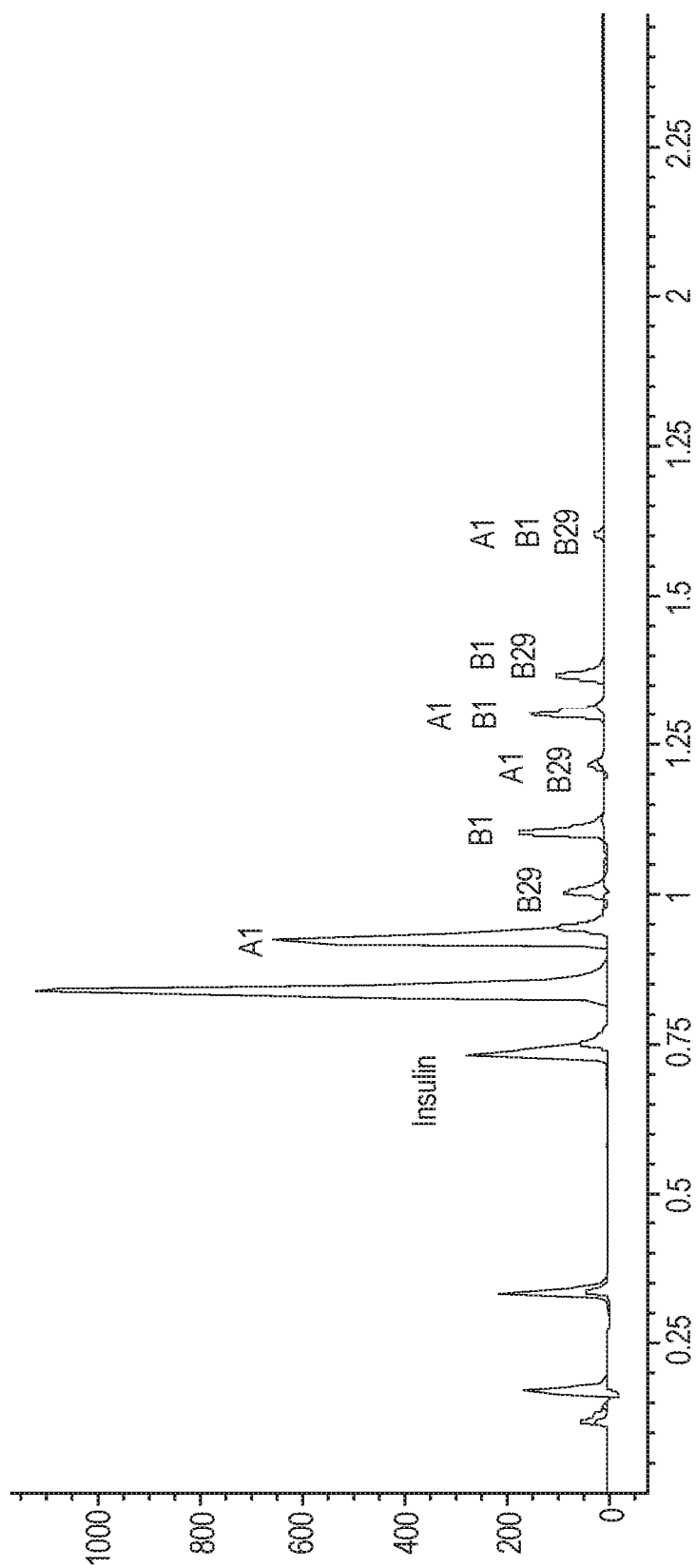


FIG. 1

2/9

SEQ ID NO: (nt/aa)	Amino Acid Differences (Relative to SEQ ID NO: 1262)	A1		B29		B1		A1/B29		A1/B1		B1/B29	
		% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.
1263/1264	V28A;G74D;Q547K;	+	++++		+								
953/954	W431R;	+	++++		+								
955/956	F701L;	+	++++										
957/958	F701A;	+	++++										
1265/1266	F701Y;	+	++++		+								
959/960	F24A;	+	++++		+								+
1267/1268	F71L;	+	++++		+				+				
961/962	F71V;	+	++++				+						
1269/1270	F71C;	+	++++		+								
963/964	F71K;	+	++++		+				+				
1271/1272	F71R;		++++										
965/966	F71E;	+	++++		+								
967/968	F24Y;V28A;	+	++++		+				+				
969/970	M697L;	+	++++		+								

FIG. 2A

3/9

SEQ ID NO: (nt/aa)	Amino Acid Differences (Relative to SEQ ID NO: 1262)	A1		B29		B1		A1/B29		A1/B1		B1/B29	
		% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.
1273/1274	V56T;	+	++++		+								
1275/1276	V56I;	+	++++		+								
1277/1278	V56L;	+	++++		+								
971/972	I177T;	+	++++		+								
1281/1282	W154F;	+	++++		+								
973/974	W154F;L754P;	+	++++		+								
975/976	F71C;G74D;	+	++++	+	+				+				
1285/1286	F71Q;G74D;P1 64S;	+	++++	+	+				+				
1287/1288	F71G;G74D;	++	+++	+	+	+	+			+	+		
979/980	F701H;	+	++++										
981/982	F701C;	+	++++		+								
983/984	F701I;	++	++++										
985/986	F701M;	+	++++		+				+				
1289/1290	F701W;	+	++++		+								

FIG. 2B

4/9

SEQ ID NO: (nt/aa)	Amino Acid Differences (Relative to SEQ ID NO: 1262)	A1		B29		B1		A1/B29		A1/B1		B1/B29	
		% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2
1291/1292	F701V;	+	++++						+				
987/988	M697F;	+	++++		+				+				
989/990	M697G;	+	++++		+				+				+
991/992	V28A;Y31F;		+++		++								
993/994	V28A;Y31L;	+	++++		+								
995/996	V28A;Y31V;	+	+++		++								
997/998	V28A;Y31T;	+	++++		+								
999/1000	V28A;Y31C;	+	++++		+								
1001/1002	V28A;Y31N;		+++		+++								
1003/1004	V28A;Y31M;	+	++++										
1005/1006	V28A;Y31K;		+++		++								
1007/1008	F24A;Y31W;V56I;F701W;	+	++++										
1009/1010	F24A;V56I;F701W;	+	++++						+				
1011/1012	F24A;Y31C;V56I;S386P;F701												

FIG. 2C

5/9

SEQ ID NO: (nt/aa)	Amino Acid Differences (Relative to SEQ ID NO: 1262)	A1		B29		B1		A1/B29		A1/B1		B1/B29	
		% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.	% conv.	1 % sel.
	Y;												
1013/1014	F24A;F71C;F701W;	+	++++		+								
1293/1294	F24A;P29S;V56L;T352S;N483S;		++++		++								
1261/1262		+	++++		+								
1015/1016	F24A;L225V;F701Y;	+	++++										+
1017/1018	F24A;Y31W;V56T;V264A;F701W;S750G;		++++		++								
1019/1020	F24A;Y31W;F71C;F701W;	+	++++		+								
1295/1296	F24A;Q340R;V391G;		++++		++								
1021/1022	F24A;D484N;F701W;	++	++++										
1023/1024	F24A;V56T;F7	++	++++										

FIG. 2D

6/9

SEQ ID NO: (nt/aa)	Amino Acid Differences (Relative to SEQ ID NO: 1262)	A1		B29		B1		A1/B29		A1/B1		B1/B29	
		% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2
	01W;												
1025/1026	F24A;Y31W;	+	++++		+								
1027/1028	F24A;V56I;W1 54F;I270V;M69 7L;		++++		++								
1297/1298	F24A;Y31H;V5 6I;F71C;		++++		++								
1029/1030	F24A;V56I;M6 97F;F701W;	+	++++		+								
1299/1300	F24A;V56L;W 240R;F701W;		++++										
1031/1032	F24A;Y31W;V 56I;F701Y;	+	++++		+							+	
1301/1302	F24A;V56T;F7 1C;		++++		++								
1303/1304	F24A;F71L;	+	++++		+								
1033/1034	F24A;Y31W;V 56I;M697L;	+	++++		+								

FIG. 2E

7/9

SEQ ID NO: (nt/aa)	Amino Acid Differences (Relative to SEQ ID NO: 1262)	A1		B29		B1		A1/B29		A1/B1		B1/B29	
		% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2
1035/1036	F24Y;V28A;F71C;F701W;	+	++++		+				+				
1037/1038	F24Y;V28A;V56I;A308T;T379A;F701W;	+	++++		+				+				
1039/1040	F24Y;V28A;D321N;F701H;	+	++++		+								
1041/1042	F24Y;V28A;N457Y;F701W;	++	++++										
1043/1044	F24Y;V28A;V56I;F701W;	+	++++										
1045/1046	F24Y;Y27C;V28T;F701W;V729F;	+	++++		+								
1305/1306	V56L;I77T;F701W;	+	++++										
1047/1048	V56T;F71G;F701W;	++	++++										
1049/1050	M697L;F701Y;	+	++++		+								

FIG. 2F

8/9

SEQ ID NO: (nt/aa)	Amino Acid Differences (Relative to SEQ ID NO: 1262)	A1		B29		B1		A1/B29		A1/B1		B1/B29	
		% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2	% conv. 1	% sel. 2
1307/1308	W26C;F701W;		++++		+								
1051/1052	V56T;W658R;F701W;	+	++++		+								
1053/1054	V56T;F71G;F701I;	+	++++		+								
1055/1056	A410P;M697F;F701W;	+	++++		+								+
1057/1058	V56L;K322R;M697L;F701V;	+	++++										
1059/1060	V56L;F701H;	+	++++		+								
1061/1062	Y31C;V56L;F701H;	+	++++						+				
1063/1064	F71G;F701W;	++	++++										
1065/1066	T129A;I511F;F701Y;		++++		+								
1309/1310	D501N;F701W;	+	++++		+								
1067/1068	V56T;F701W;L711Q;	+	++++		+								

FIG. 2G

SEQ ID NO: (nt/aa)	Amino Acid Differences (Relative to SEQ ID NO: 1262)	A1		B29		B1		A1/B29		A1/B1		B1/B29	
		% conv. ¹	% sel. ²	% conv. ¹	% sel. ²	% conv. ¹	% sel. ²	% conv. ¹	% sel. ²	% conv. ¹	% sel. ²	% conv. ¹	% sel. ²
1069/1070	I423T;F701W;	+	++++		+								
1071/1072	V56I;W154F;F701W;	+	++++		+								
1073/1074	V56L;W119R; K146E;F701Y;		++++		+								
1075/1076	V56T;M697L;F701W;	+	++++										
1311/1312	V56T;F701W;	+	++++		+								
¹ Percent conversion was defined as follows: "+" = greater than 1% but less than 10% conversion; "++" = greater than 10.0 % but less than 20% conversion; "+++" = greater than 20% conversion. ² Percent selectivity was defined as follows: "+" = greater than 5% but less than 20% selective; "++" = greater than 20% but less than 40% selective; "+++" = greater than 40% but less than 60% selective; "++++" = greater than 60% but less than 80% selective; "+++++" = greater than 80%.													

FIG. 2H