

Figure S1. Approach for identifying calcineurin-dephosphorylated residues on Cav3.2 T-type calcium channel.

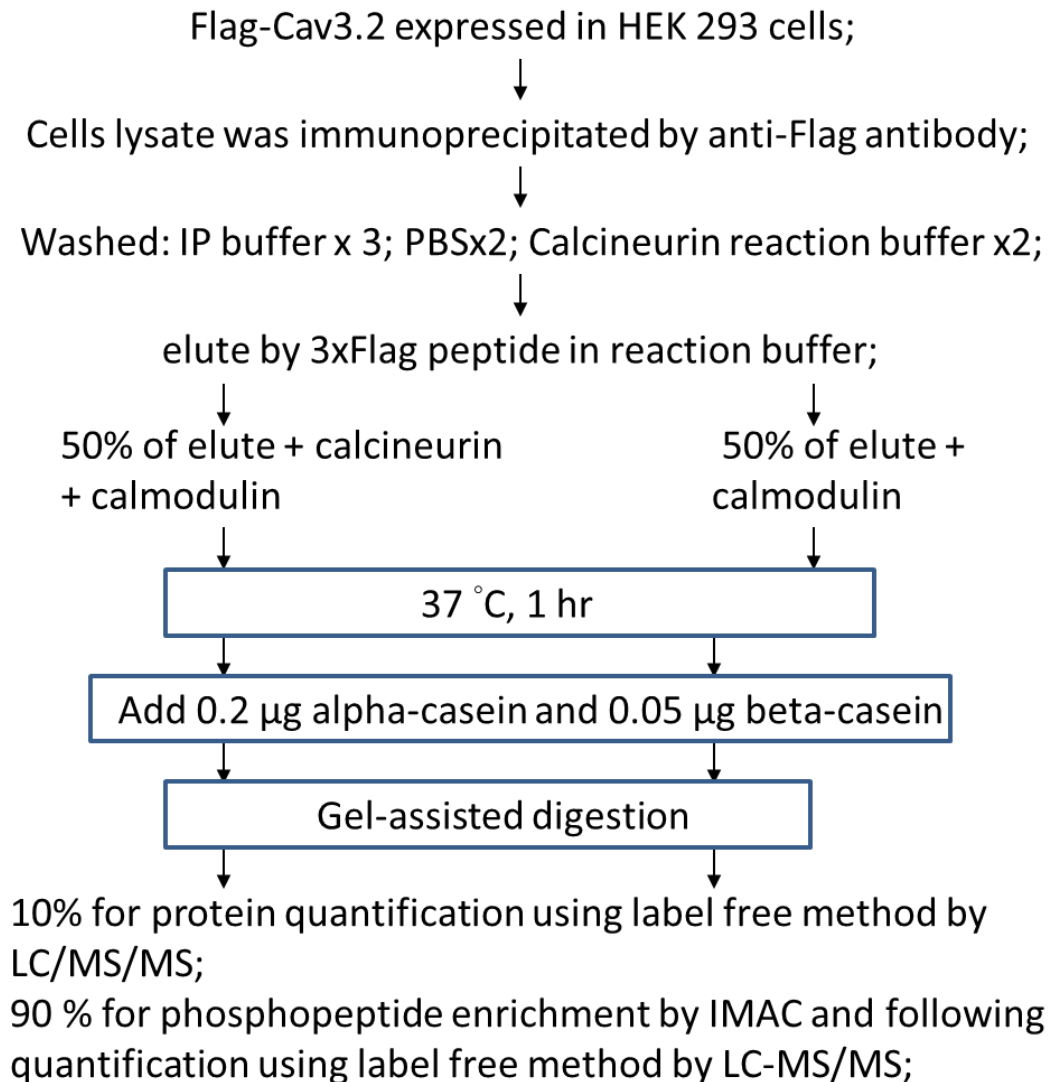
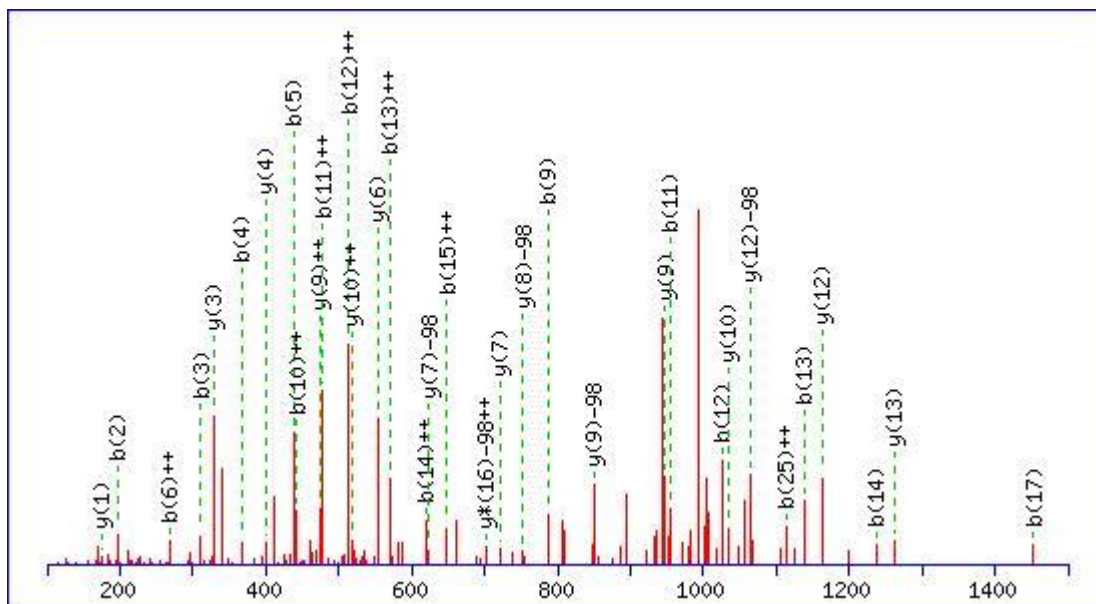


Figure S2. Mascot search results of MSMS spectra

1_MS/MS Fragmentation of **VPLGAPPPGPAALVGASPESPGAPGR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 2398.2046

Variable modifications:

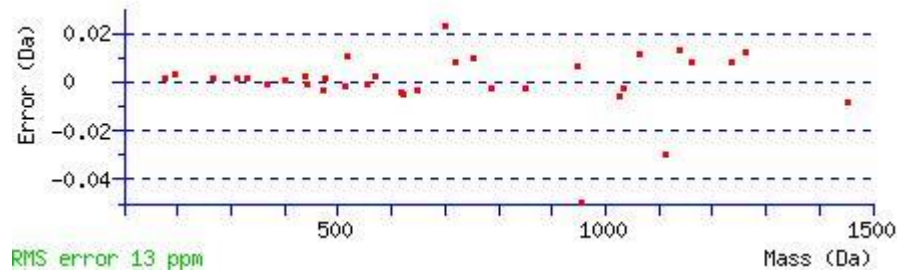
S20 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

Ions Score: 70 Expect: 0.00026

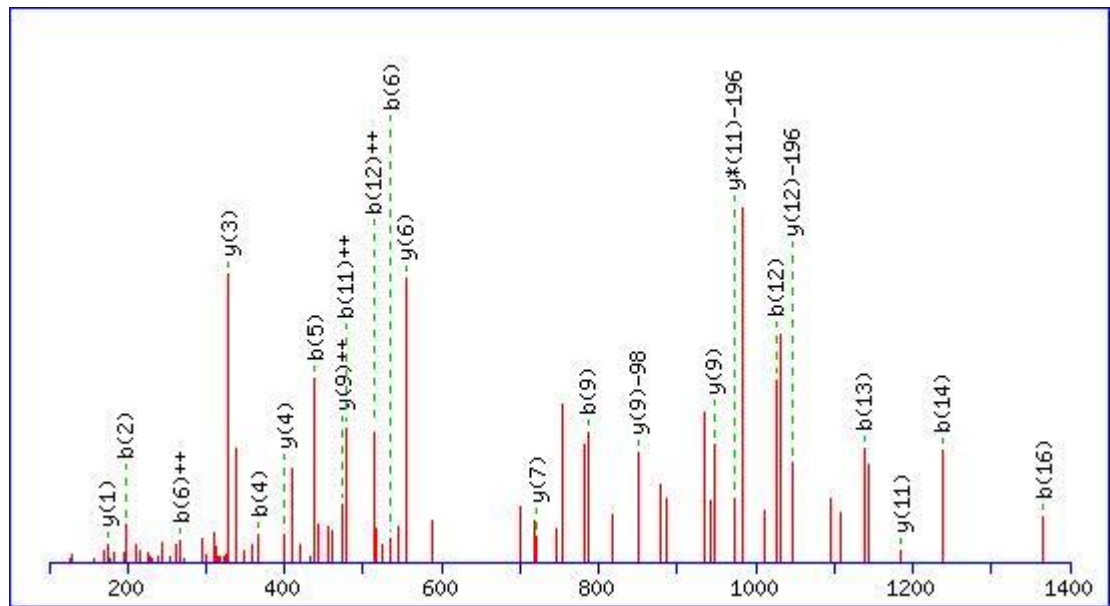
Matches : 34/344 fragment ions using 57 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	100.0757	50.5415			V							26
2	197.1285	99.0679			P	2300.1435	1150.5754	2283.1169	1142.0621	2282.1329	1141.5701	25
3	310.2125	155.6099			L	2203.0907	1102.0490	2186.0642	1093.5357	2185.0801	1093.0437	24
4	367.2340	184.1206			G	2090.0066	1045.5070	2072.9801	1036.9937	2071.9961	1036.5017	23
5	438.2711	219.6392			A	2032.9852	1016.9962	2015.9586	1008.4830	2014.9746	1007.9909	22
6	535.3239	268.1656			P	1961.9481	981.4777	1944.9215	972.9644	1943.9375	972.4724	21
7	632.3766	316.6920			P	1864.8953	932.9513	1847.8688	924.4380	1846.8847	923.9460	20
8	729.4294	365.2183			P	1767.8425	884.4249	1750.8160	875.9116	1749.8320	875.4196	19
9	786.4509	393.7291			G	1670.7898	835.8985	1653.7632	827.3853	1652.7792	826.8932	18
10	883.5036	442.2554			P	1613.7683	807.3878	1596.7418	798.8745	1595.7577	798.3825	17
11	954.5407	477.7740			A	1516.7156	758.8614	1499.6890	750.3481	1498.7050	749.8561	16
12	1025.5778	513.2926			A	1445.6784	723.3429	1428.6519	714.8296	1427.6679	714.3376	15
13	1138.6619	569.8346			L	1374.6413	687.8243	1357.6148	679.3110	1356.6308	678.8190	14
14	1237.7303	619.3688			V	1261.5573	631.2823	1244.5307	622.7690	1243.5467	622.2770	13
15	1294.7518	647.8795			G	1162.4888	581.7481	1145.4623	573.2348	1144.4783	572.7428	12
16	1365.7889	683.3981			A	1105.4674	553.2373	1088.4408	544.7241	1087.4568	544.2320	11
17	1452.8209	726.9141	1434.8104	717.9088	S	1034.4303	517.7188	1017.4037	509.2055	1016.4197	508.7135	10

18	1549.8737	775.4405	1531.8631	766.4352	P	947.3982	474.2028	930.3717	465.6895	929.3877	465.1975	9
19	1678.9163	839.9618	1660.9057	830.9565	E	850.3455	425.6764	833.3189	417.1631	832.3349	416.6711	8
20	1845.9146	923.4610	1827.9041	914.4557	S	721.3029	361.1551	704.2763	352.6418	703.2923	352.1498	7
21	1942.9674	971.9873	1924.9568	962.9821	P	554.3045	277.6559	537.2780	269.1426			6
22	1999.9889	1000.4981	1981.9783	991.4928	G	457.2518	229.1295	440.2252	220.6162			5
23	2071.0260	1036.0166	2053.0154	1027.0113	A	400.2303	200.6188	383.2037	192.1055			4
24	2168.0788	1084.5430	2150.0682	1075.5377	P	329.1932	165.1002	312.1666	156.5870			3
25	2225.1002	1113.0537	2207.0896	1104.0485	G	232.1404	116.5738	215.1139	108.0606			2
26					R	175.1190	88.0631	158.0924	79.5498			1



2_MS/MS Fragmentation of **VPLGAPPPGPAALVGASPESPGAPGR**
Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 2478.1709

Variable modifications:

S17 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

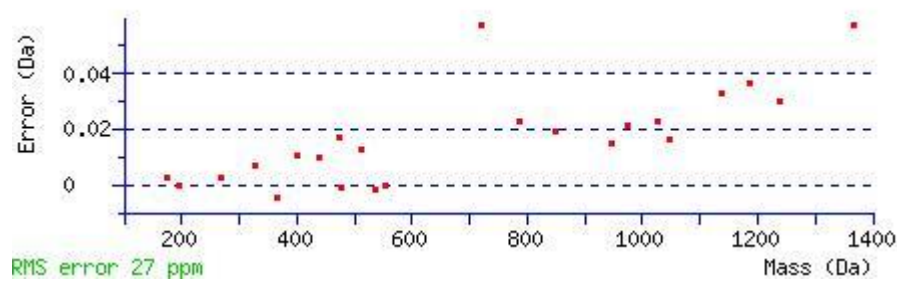
S20 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

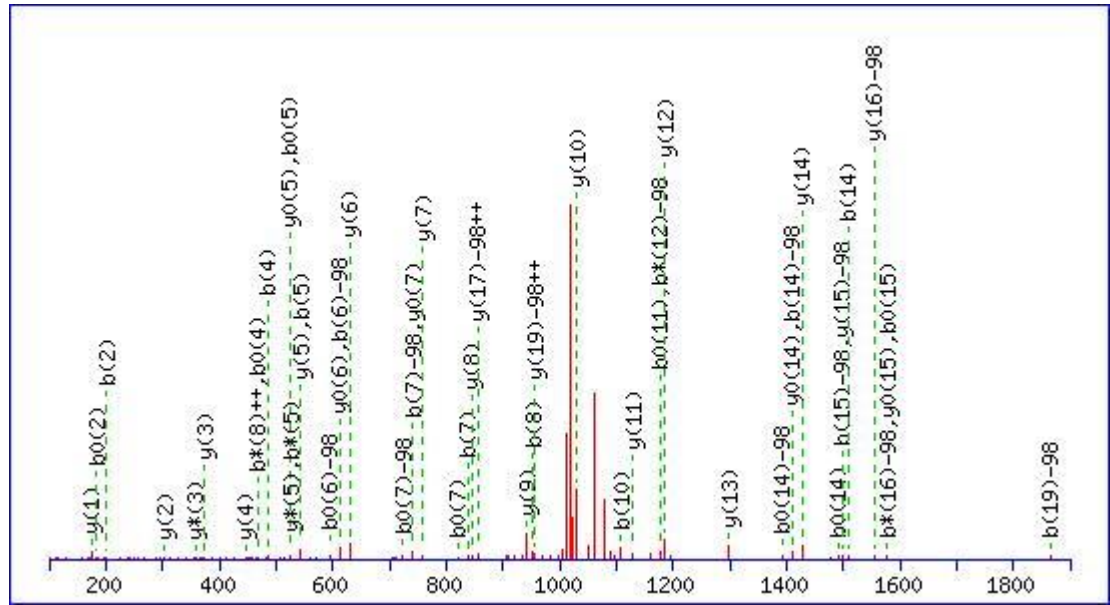
Ions Score: 48 Expect: 0.044

Matches : 23/356 fragment ions using 50 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	100.0757	50.5415			V							26
2	197.1285	99.0679			P	2380.1098	1190.5585	2363.0833	1182.0453	2362.0992	1181.5533	25
3	310.2125	155.6099			L	2283.0570	1142.0322	2266.0305	1133.5189	2265.0465	1133.0269	24
4	367.2340	184.1206			G	2169.9730	1085.4901	2152.9464	1076.9769	2151.9624	1076.4848	23
5	438.2711	219.6392			A	2112.9515	1056.9794	2095.9250	1048.4661	2094.9409	1047.9741	22
6	535.3239	268.1656			P	2041.9144	1021.4608	2024.8879	1012.9476	2023.9038	1012.4556	21
7	632.3766	316.6920			P	1944.8616	972.9345	1927.8351	964.4212	1926.8511	963.9292	20
8	729.4294	365.2183			P	1847.8089	924.4081	1830.7823	915.8948	1829.7983	915.4028	19
9	786.4509	393.7291			G	1750.7561	875.8817	1733.7296	867.3684	1732.7455	866.8764	18
10	883.5036	442.2554			P	1693.7346	847.3710	1676.7081	838.8577	1675.7241	838.3657	17
11	954.5407	477.7740			A	1596.6819	798.8446	1579.6553	790.3313	1578.6713	789.8393	16
12	1025.5778	513.2926			A	1525.6448	763.3260	1508.6182	754.8127	1507.6342	754.3207	15
13	1138.6619	569.8346			L	1454.6077	727.8075	1437.5811	719.2942	1436.5971	718.8022	14
14	1237.7303	619.3688			V	1341.5236	671.2654	1324.4970	662.7522	1323.5130	662.2602	13
15	1294.7518	647.8795			G	1242.4552	621.7312	1225.4286	613.2180	1224.4446	612.7259	12
16	1365.7889	683.3981			A	1185.4337	593.2205	1168.4072	584.7072	1167.4231	584.2152	11
17	1532.7873	766.8973	1514.7767	757.8920	S	1114.3966	557.7019	1097.3700	549.1887	1096.3860	548.6967	10

18	1629.8400	815.4236	1611.8295	806.4184	P	947.3982	474.2028	930.3717	465.6895	929.3877	465.1975	9
19	1758.8826	879.9449	1740.8721	870.9397	E	850.3455	425.6764	833.3189	417.1631	832.3349	416.6711	8
20	1925.8810	963.4441	1907.8704	954.4388	S	721.3029	361.1551	704.2763	352.6418	703.2923	352.1498	7
21	2022.9337	1011.9705	2004.9232	1002.9652	P	554.3045	277.6559	537.2780	269.1426			6
22	2079.9552	1040.4812	2061.9446	1031.4760	G	457.2518	229.1295	440.2252	220.6162			5
23	2150.9923	1075.9998	2132.9818	1066.9945	A	400.2303	200.6188	383.2037	192.1055			4
24	2248.0451	1124.5262	2230.0345	1115.5209	P	329.1932	165.1002	312.1666	156.5870			3
25	2305.0665	1153.0369	2287.0560	1144.0316	G	232.1404	116.5738	215.1139	108.0606			2
26					R	175.1190	88.0631	158.0924	79.5498			1





Monoisotopic mass of neutral peptide Mr(calc): 2136.9324

Variable modifications:

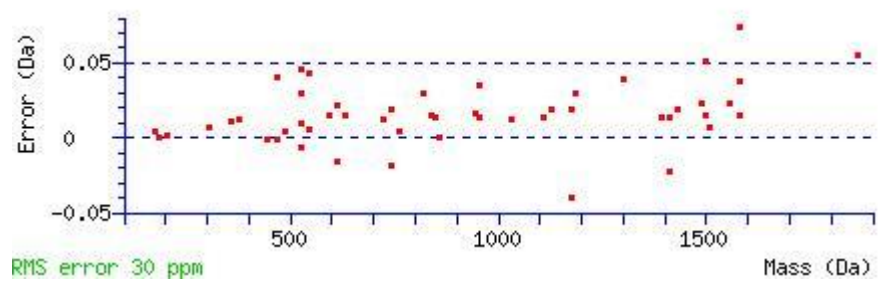
S6 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 133 Expect: 1.3e-010

Matches : 51/334 fragment ions using 52 most intense peaks ([help](#))

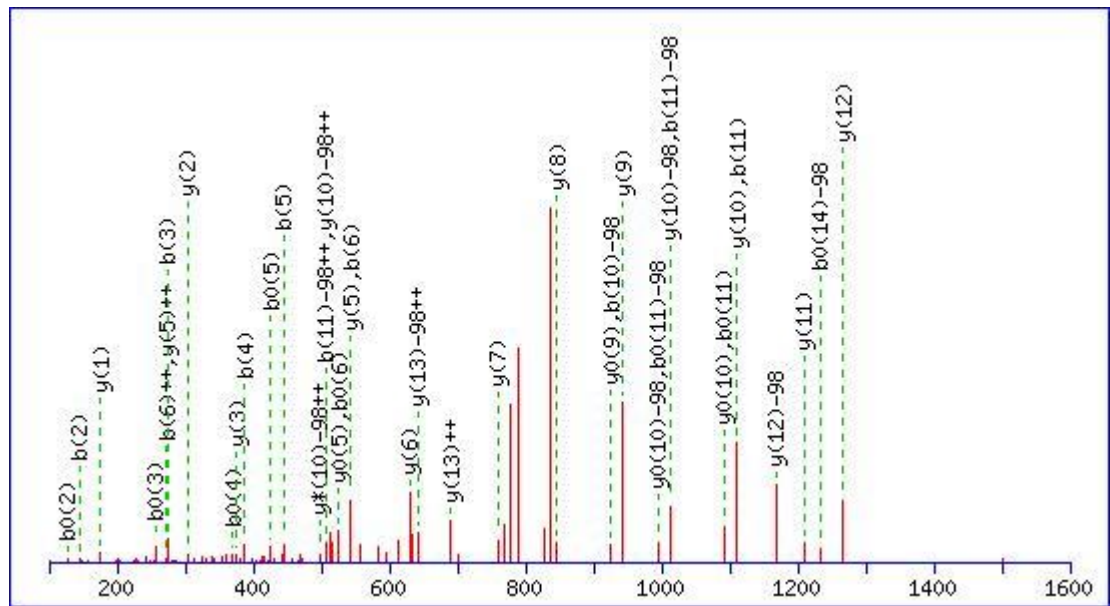
#	b	b ⁺⁺	b [*]	b ^{*++}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	130.0499	65.5286			112.0393	56.5233	E							20
2	201.0870	101.0471			183.0764	92.0418	A	1910.9203	955.9638	1893.8937	947.4505	1892.9097	946.9585	19
3	330.1296	165.5684			312.1190	156.5631	E	1839.8831	920.4452	1822.8566	911.9319	1821.8726	911.4399	18
4	486.2307	243.6190	469.2041	235.1057	468.2201	234.6137	R	1710.8406	855.9239	1693.8140	847.4106	1692.8300	846.9186	17
5	543.2522	272.1297	526.2256	263.6164	525.2416	263.1244	G	1554.7394	777.8734	1537.7129	769.3601	1536.7289	768.8681	16
6	612.2736	306.6404	595.2471	298.1272	594.2630	297.6352	S	1497.7180	749.3626	1480.6914	740.8494	1479.7074	740.3573	15
7	741.3162	371.1617	724.2897	362.6485	723.3056	362.1565	E	1428.6965	714.8519	1411.6700	706.3386	1410.6859	705.8466	14
8	854.4003	427.7038	837.3737	419.1905	836.3897	418.6985	L	1299.6539	650.3306	1282.6274	641.8173	1281.6434	641.3253	13
9	911.4217	456.2145	894.3952	447.7012	893.4112	447.2092	G	1186.5699	593.7886	1169.5433	585.2753	1168.5593	584.7833	12

10	1010.4901	505.7487	993.4636	497.2354	992.4796	496.7434	V	1129.5484	565.2778	1112.5218	556.7646	1111.5378	556.2726	11
11	1097.5222	549.2647	1080.4956	540.7515	1079.5116	540.2594	S	1030.4800	515.7436	1013.4534	507.2304	1012.4694	506.7383	10
12	1194.5749	597.7911	1177.5484	589.2778	1176.5644	588.7858	P	943.4480	472.2276	926.4214	463.7143	925.4374	463.2223	9
13	1281.6070	641.3071	1264.5804	632.7938	1263.5964	632.3018	S	846.3952	423.7012	829.3686	415.1880	828.3846	414.6959	8
14	1410.6496	705.8284	1393.6230	697.3151	1392.6390	696.8231	E	759.3632	380.1852	742.3366	371.6719	741.3526	371.1799	7
15	1497.6815	749.3444	1480.6550	740.8312	1479.6710	740.3392	S	630.3206	315.6639	613.2940	307.1506	612.3100	306.6586	6
16	1594.7344	797.8708	1577.7078	789.3575	1576.7238	788.8655	P	543.2885	272.1479	526.2620	263.6346	525.2780	263.1426	5
17	1665.7715	833.3894	1648.7449	824.8761	1647.7609	824.3841	A	446.2358	223.6215	429.2092	215.1083	428.2252	214.6162	4
18	1736.8086	868.9079	1719.7820	860.3947	1718.7980	859.9026	A	375.1987	188.1030	358.1721	179.5897	357.1881	179.0977	3
19	1865.8519	933.4292	1848.8246	924.9160	1847.8406	924.4239	E	304.1615	152.5844	287.1350	144.0711	286.1510	143.5791	2
20							R	175.1190	88.0631	158.0924	79.5498			1



4_MS/MS Fragmentation of **GSELGVSPSPSPAER**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1651.7090

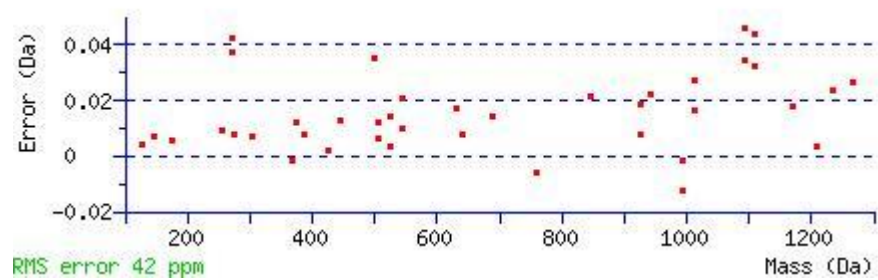
Variable modifications:

S7 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

Ions Score: 86 Expect: 6.6e-006

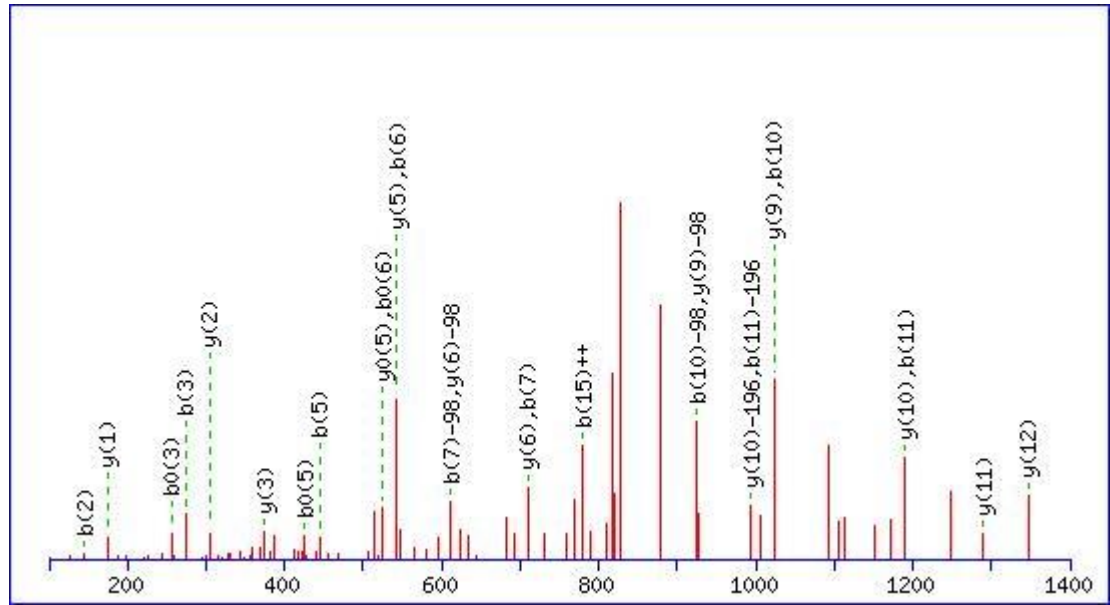
Matches : 40/218 fragment ions using 42 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ⁺⁺⁺	y ⁰	y ⁰⁺⁺	#
1	58.0287	29.5180			G							16
2	145.0608	73.0340	127.0502	64.0287	S	1595.6949	798.3511	1578.6683	789.8378	1577.6843	789.3458	15
3	274.1034	137.5553	256.0928	128.5500	E	1508.6628	754.8351	1491.6363	746.3218	1490.6523	745.8298	14
4	387.1874	194.0974	369.1769	185.0921	L	1379.6203	690.3138	1362.5937	681.8005	1361.6097	681.3085	13
5	444.2089	222.6081	426.1983	213.6028	G	1266.5362	633.7717	1249.5096	625.2585	1248.5256	624.7664	12
6	543.2773	272.1423	525.2667	263.1370	V	1209.5147	605.2610	1192.4882	596.7477	1191.5042	596.2557	11
7	710.2757	355.6415	692.2651	346.6362	S	1110.4463	555.7268	1093.4198	547.2135	1092.4357	546.7215	10
8	807.3284	404.1679	789.3179	395.1626	P	943.4480	472.2276	926.4214	463.7143	925.4374	463.2223	9
9	894.3605	447.6839	876.3499	438.6786	S	846.3952	423.7012	829.3686	415.1880	828.3846	414.6959	8
10	1023.4030	512.2052	1005.3925	503.1999	E	759.3632	380.1852	742.3366	371.6719	741.3526	371.1799	7
11	1110.4351	555.7212	1092.4245	546.7159	S	630.3206	315.6639	613.2940	307.1506	612.3100	306.6586	6
12	1207.4878	604.2476	1189.4773	595.2423	P	543.2885	272.1479	526.2620	263.6346	525.2780	263.1426	5
13	1278.5250	639.7661	1260.5144	630.7608	A	446.2358	223.6215	429.2092	215.1083	428.2252	214.6162	4
14	1349.5621	675.2847	1331.5515	666.2794	A	375.1987	188.1030	358.1721	179.5897	357.1881	179.0977	3
15	1478.6047	739.8060	1460.5941	730.8007	E	304.1615	152.5844	287.1350	144.0711	286.1510	143.5791	2
16					R	175.1190	88.0631	158.0924	79.5498			1



5_MS/MS Fragmentation of **GSELGVSPSESPAER**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1731.6754

Variable modifications:

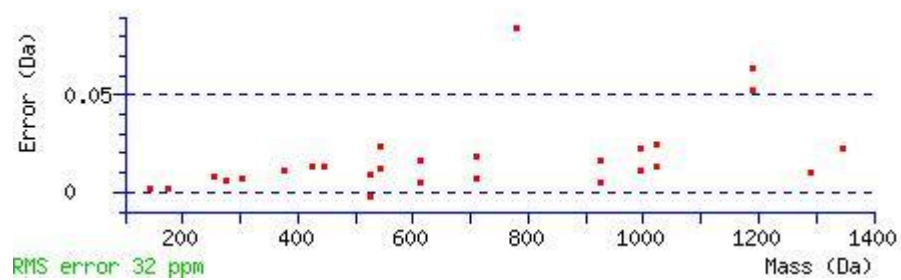
S7 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

S11 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

Ions Score: 75 Expect: 6.2e-005

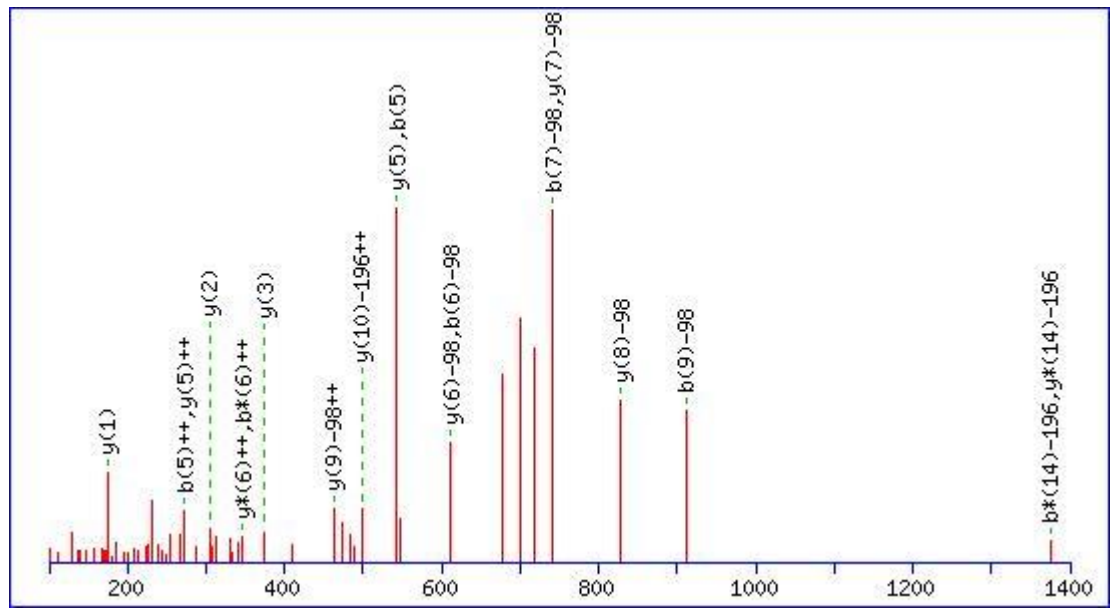
Matches : 27/242 fragment ions using 25 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	58.0287	29.5180			G							16
2	145.0608	73.0340	127.0502	64.0287	S	1675.6612	838.3342	1658.6347	829.8210	1657.6506	829.3290	15
3	274.1034	137.5553	256.0928	128.5500	E	1588.6292	794.8182	1571.6026	786.3050	1570.6186	785.8129	14
4	387.1874	194.0974	369.1769	185.0921	L	1459.5866	730.2969	1442.5600	721.7837	1441.5760	721.2916	13
5	444.2089	222.6081	426.1983	213.6028	G	1346.5025	673.7549	1329.4760	665.2416	1328.4920	664.7496	12
6	543.2773	272.1423	525.2667	263.1370	V	1289.4811	645.2442	1272.4545	636.7309	1271.4705	636.2389	11
7	710.2757	355.6415	692.2651	346.6362	S	1190.4126	595.7100	1173.3861	587.1967	1172.4021	586.7047	10
8	807.3284	404.1679	789.3179	395.1626	P	1023.4143	512.2108	1006.3877	503.6975	1005.4037	503.2055	9
9	894.3605	447.6839	876.3499	438.6786	S	926.3615	463.6844	909.3350	455.1711	908.3510	454.6791	8
10	1023.4030	512.2052	1005.3925	503.1999	E	839.3295	420.1684	822.3029	411.6551	821.3189	411.1631	7
11	1190.4014	595.7043	1172.3908	586.6991	S	710.2869	355.6471	693.2603	347.1338	692.2763	346.6418	6
12	1287.4542	644.2307	1269.4436	635.2254	P	543.2885	272.1479	526.2620	263.6346	525.2780	263.1426	5
13	1358.4913	679.7493	1340.4807	670.7440	A	446.2358	223.6215	429.2092	215.1083	428.2252	214.6162	4
14	1429.5284	715.2678	1411.5178	706.2626	A	375.1987	188.1030	358.1721	179.5897	357.1881	179.0977	3
15	1558.5710	779.7891	1540.5604	770.7839	E	304.1615	152.5844	287.1350	144.0711	286.1510	143.5791	2
16					R	175.1190	88.0631	158.0924	79.5498			1



6_MS/MS Fragmentation of **EAERGSELGVSPSESPAER**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 2296.8651

Variable modifications:

S6 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

S11 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

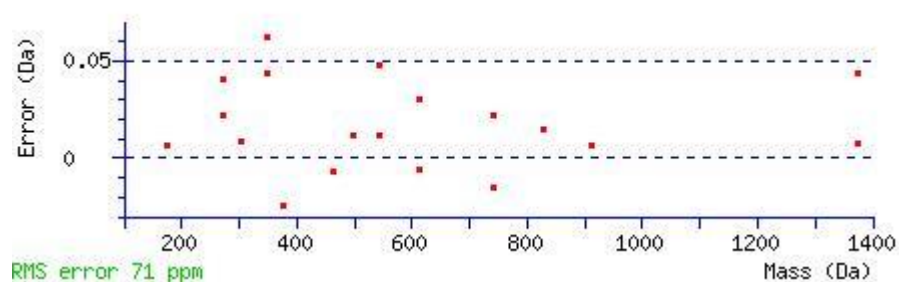
S15 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

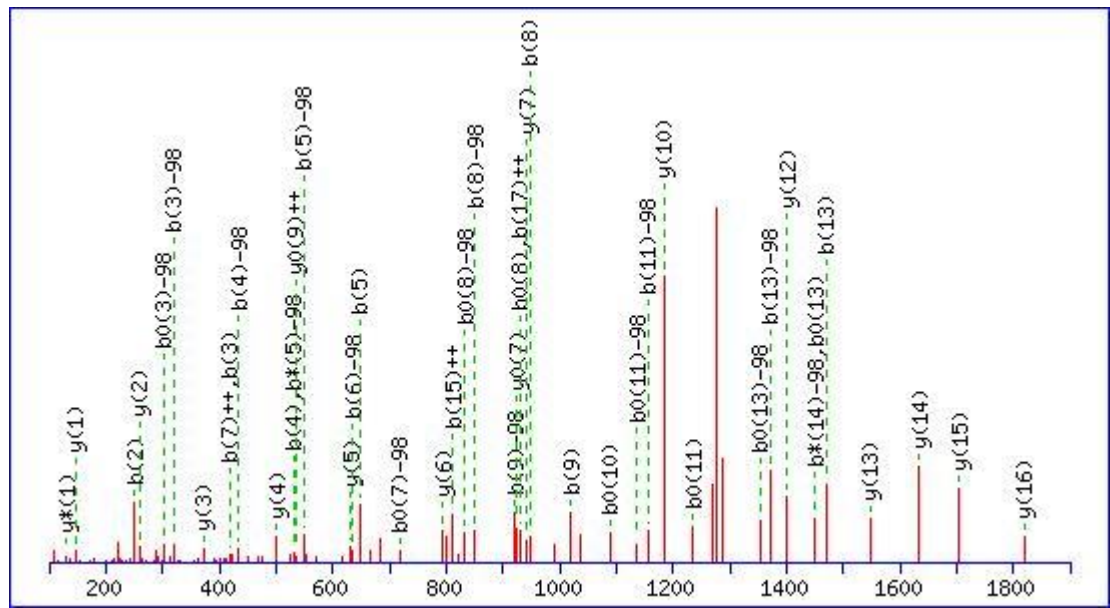
Ions Score: 36 Expect: 0.41

Matches : 19/388 fragment ions using 22 most intense peaks ([help](#))

#	b	b ⁺⁺	b [*]	b ^{*++}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	130.0499	65.5286			112.0393	56.5233	E							20
2	201.0870	101.0471			183.0764	92.0418	A	1874.8991	937.9532	1857.8726	929.4399	1856.8886	928.9479	19
3	330.1296	165.5684			312.1190	156.5631	E	1803.8620	902.4346	1786.8355	893.9214	1785.8514	893.4294	18
4	486.2307	243.6190	469.2041	235.1057	468.2201	234.6137	R	1674.8194	837.9133	1657.7929	829.4001	1656.8089	828.9081	17
5	543.2522	272.1297	526.2256	263.6164	525.2416	263.1244	G	1518.7183	759.8628	1501.6918	751.3495	1500.7077	750.8575	16
6	612.2736	306.6404	595.2471	298.1272	594.2630	297.6352	S	1461.6968	731.3521	1444.6703	722.8388	1443.6863	722.3468	15
7	741.3162	371.1617	724.2897	362.6485	723.3056	362.1565	E	1392.6754	696.8413	1375.6488	688.3281	1374.6648	687.8360	14
8	854.4003	427.7038	837.3737	419.1905	836.3897	418.6985	L	1263.6328	632.3200	1246.6062	623.8068	1245.6222	623.3148	13
9	911.4217	456.214	894.3952	447.701	893.4112	447.209	G	1150.548	575.778	1133.522	567.264	1132.538	566.772	1

		5		2		2		7	0	2	7	2	7	2
10	1010.490 1	505.748 7	993.4636	497.235 4	992.4796	496.743 4	V	1093.527 3	547.267 3	1076.500 7	538.754 0	1075.516 7	538.262 0	12
11	1079.511 6	540.259 4	1062.485 1	531.746 2	1061.501 0	531.254 2	S	994.4588	497.733 1	977.4323	489.219 8	976.4483	488.727 8	10
12	1176.564 4	588.785 8	1159.537 8	580.272 6	1158.553 8	579.780 5	P	925.4374	463.222 3	908.4108	454.709 1	907.4268	454.217 0	9
13	1263.596 4	632.301 8	1246.569 9	623.788 6	1245.585 8	623.296 6	S	828.3846	414.695 9	811.3581	406.182 7	810.3741	405.690 7	8
14	1392.639 0	696.823 1	1375.612 4	688.309 9	1374.628 4	687.817 9	E	741.3526	371.179 9	724.3260	362.666 7	723.3420	362.174 7	7
15	1461.660 5	731.333 9	1444.633 9	722.820 6	1443.649 9	722.328 6	S	612.3100	306.658 6	595.2835	298.145 4	594.2994	297.653 4	6
16	1558.713 2	779.860 3	1541.686 7	771.347 0	1540.702 7	770.855 0	P	543.2885	272.147 9	526.2620	263.634 6	525.2780	263.142 6	5
17	1629.750 3	815.378 8	1612.723 8	806.865 5	1611.739 8	806.373 5	A	446.2358	223.621 5	429.2092	215.108 3	428.2252	214.616 2	4
18	1700.787 5	850.897 4	1683.760 9	842.384 1	1682.776 9	841.892 1	A	375.1987	188.103 0	358.1721	179.589 7	357.1881	179.097 7	3
19	1829.830 0	915.418 7	1812.803 5	906.905 4	1811.819 5	906.413 4	E	304.1615	152.584 4	287.1350	144.071 1	286.1510	143.579 1	2
20							R	175.1190	88.0631	158.0924	79.5498			1





Monoisotopic mass of neutral peptide Mr(calc): 2652.1124

Variable modifications:

S3 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

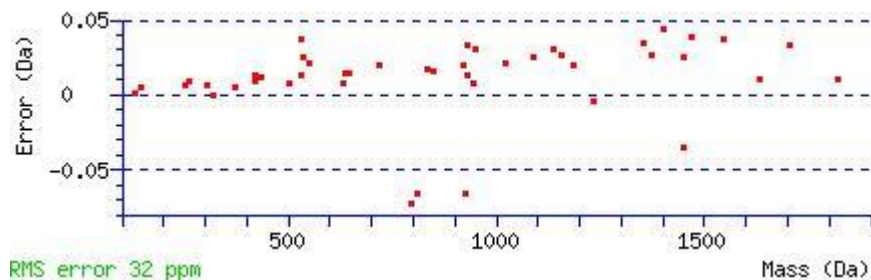
C17 : Methylthio (C)

Ions Score: 84 Expect: 1.2e-005

Matches : 45/378 fragment ions using 61 most intense peaks ([help](#))

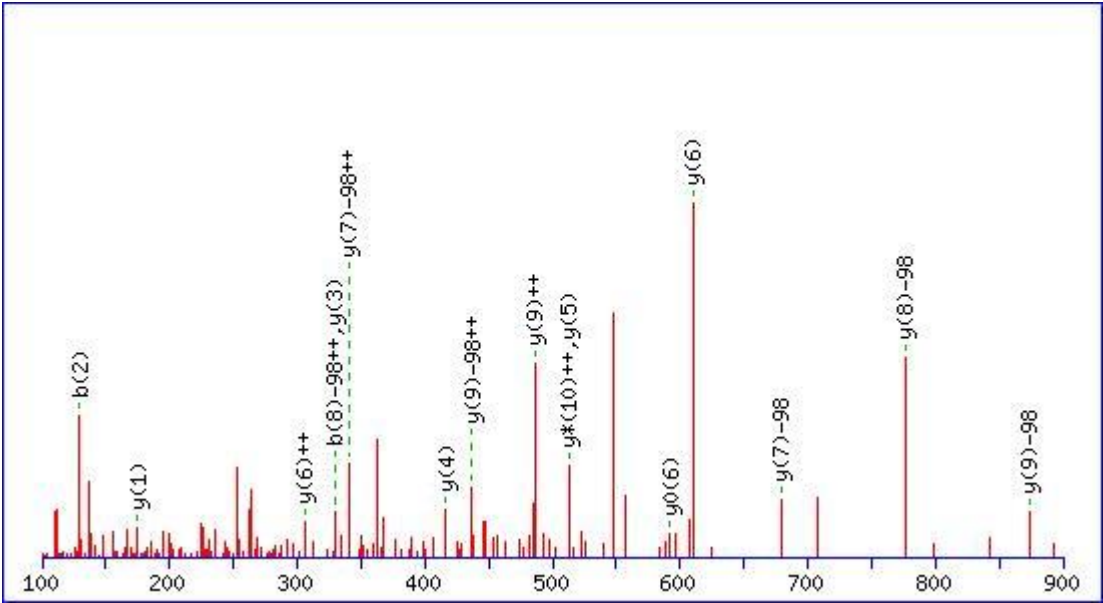
#	b	b ⁺⁺	b [*]	b ⁺⁺⁺	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ⁺⁺⁺	y ⁰	y ⁰⁺⁺	#
1	138.066 2	69.5367					H							2 3
2	251.150 3	126.078 8					L	2418.08 40	1209.54 56	2401.05 74	1201.03 23	2400.07 34	1200.54 03	2 2
3	320.171 7	160.589 5			302.161 1	151.584 2	S	2304.99 99	1153.00 36	2287.97 33	1144.49 03	2286.98 93	1143.99 83	2 1
4	434.214 6	217.611 0	417.188 1	209.097 7	416.204 1	208.605 7	N	2235.97 84	1118.492 9	2218.95 19	1109.97 96	2217.96 79	1109.48 76	2 0
5	549.241 6	275.124 4	532.215 0	266.611 2	531.231 0	266.119 1	D	2121.93 55	1061.47 14	2104.90 90	1052.95 81	2103.92 49	1052.46 61	1 9
6	636.273 6	318.640 4	619.247 1	310.127 2	618.263 0	309.635 2	S	2006.90 86	1003.95 79	1989.88 20	995.444 6	1988.89 80	994.952 6	1 8
7	737.321 3	369.164 3	720.294 7	360.651 0	719.310 7	360.159 0	T	1919.87 65	960.441 9	1902.85 00	951.928 6	1901.86 60	951.436 6	1 7
8	850.405 4	425.706 3	833.378 8	417.193 0	832.394 8	416.701 0	L	1818.82 89	909.918 1	1801.80 23	901.404 8	1800.81 83	900.912 8	1 6
9	921.442 5	461.224 9	904.415 9	452.711 6	903.431 9	452.219 6	A	1705.74 48	853.376 0	1688.71 82	844.862 8	1687.73 42	844.370 7	1 5

10	1008.47 45	504.740 9	991.447 9	496.227 6	990.463 9	495.735 6	S	1634.70 77	817.857 5	1617.68 11	809.344 2	1616.69 71	808.852 2	14
11	1155.54 29	578.275 1	1138.51 64	569.761 8	1137.53 23	569.269 8	F	1547.67 56	774.341 5	1530.64 91	765.828 2	1529.66 51	765.336 2	13
12	1242.57 49	621.791 1	1225.54 84	613.277 8	1224.56 44	612.785 8	S	1400.60 72	700.807 3	1383.58 07	692.294 0	1382.59 67	691.802 0	12
13	1371.61 75	686.312 4	1354.59 10	677.799 1	1353.60 70	677.307 1	E	1313.57 52	657.291 2	1296.54 87	648.778 0	1295.56 46	648.286 0	11
14	1468.67 03	734.838 8	1451.64 37	726.325 5	1450.65 97	725.833 5	P	1184.53 26	592.769 9	1167.50 61	584.256 7	1166.52 20	583.764 7	10
15	1525.69 18	763.349 5	1508.66 52	754.836 2	1507.68 12	754.344 2	G	1087.47 98	544.243 6	1070.45 33	535.730 3	1069.46 93	535.238 3	9
16	1612.72 38	806.865 5	1595.69 72	798.352 3	1594.71 32	797.860 3	S	1030.45 84	515.732 8	1013.43 18	507.219 6	1012.44 78	506.727 5	8
17	1761.72 07	881.364 0	1744.69 41	872.850 7	1743.71 01	872.358 7	C	943.426 4	472.216 8	926.399 8	463.703 5	925.415 8	463.211 5	7
18	1924.78 40	962.895 7	1907.75 75	954.382 4	1906.77 35	953.890 4	Y	794.429 4	397.718 4	777.402 9	389.205 1	776.418 9	388.713 1	6
19	2053.82 66	1027.41 69	2036.80 01	1018.90 37	2035.81 61	1018.41 17	E	631.366 1	316.186 7	614.339 6	307.673 4	613.355 6	307.181 4	5
20	2182.86 92	1091.93 82	2165.84 27	1083.42 50	2164.85 86	1082.93 30	E	502.323 5	251.665 4	485.297 0	243.152 1	484.313 0	242.660 1	4
21	2295.95 33	1148.48 03	2278.92 67	1139.96 70	2277.94 27	1139.47 50	L	373.280 9	187.144 1	356.254 4	178.630 8			3
22	2409.03 73	1205.02 23	2392.01 08	1196.50 90	2391.02 68	1196.01 70	L	260.196 9	130.602 1	243.170 3	122.088 8			2
23							K	147.112 8	74.0600	130.086 3	65.5468			1



8_MS/MS Fragmentation of **AGAPPPSPGR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1169.5230

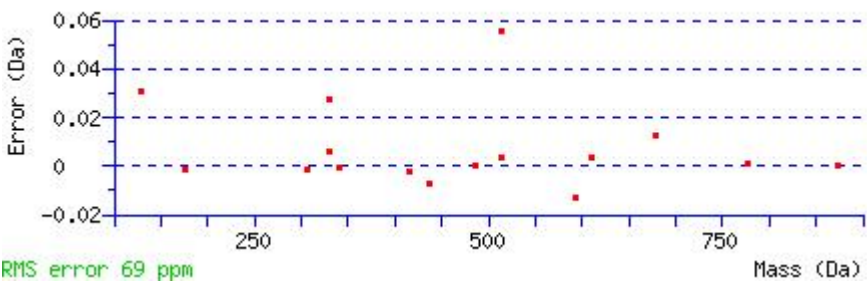
Variable modifications:

S6 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 37 Expect: 0.35

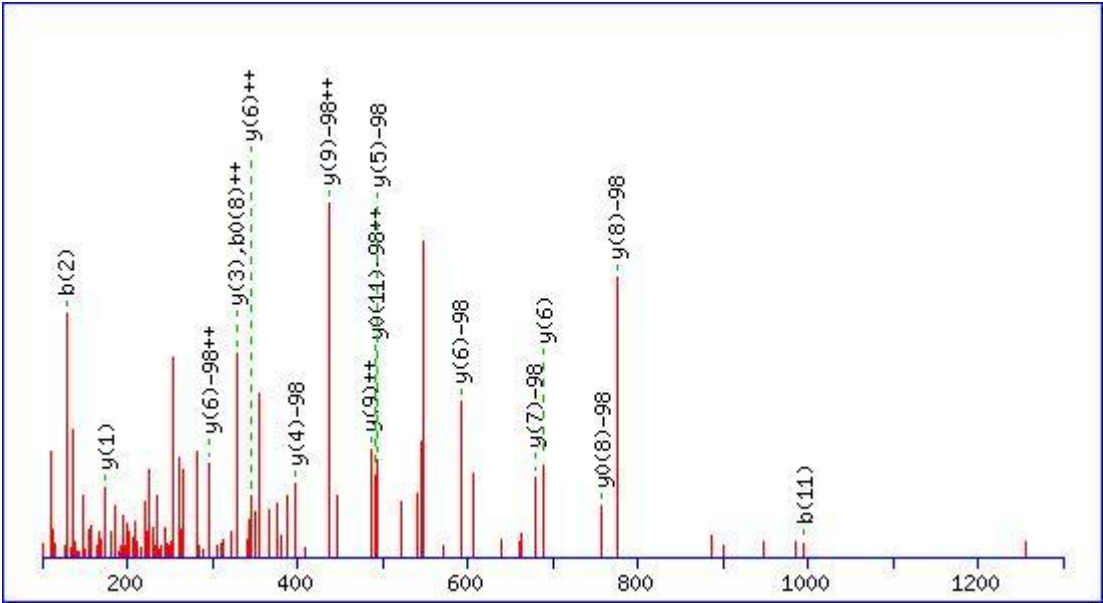
Matches : 16/148 fragment ions using 35 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	72.0444	36.5258			A							12
2	129.0659	65.0366			G	1001.5163	501.2618	984.4898	492.7485	983.5057	492.2565	11
3	200.1030	100.5551			A	944.4948	472.7511	927.4683	464.2378	926.4843	463.7458	10
4	297.1557	149.0815			P	873.4577	437.2325	856.4312	428.7192	855.4472	428.2272	9
5	394.2085	197.6079			P	776.4050	388.7061	759.3784	380.1928	758.3944	379.7008	8
6	463.2300	232.1186	445.2194	223.1133	S	679.3522	340.1797	662.3257	331.6665	661.3416	331.1745	7
7	560.2827	280.6450	542.2722	271.6397	P	610.3307	305.6690	593.3042	297.1557	592.3202	296.6637	6
8	657.3355	329.1714	639.3249	320.1661	P	513.2780	257.1426	496.2514	248.6293	495.2674	248.1373	5
9	744.3675	372.6874	726.3569	363.6821	S	416.2252	208.6162	399.1987	200.1030	398.2146	199.6110	4
10	841.4203	421.2138	823.4097	412.2085	P	329.1932	165.1002	312.1666	156.5870			3
11	898.4417	449.7245	880.4312	440.7192	G	232.1404	116.5738	215.1139	108.0606			2
12					R	175.1190	88.0631	158.0924	79.5498			1



9_MS/MS Fragmentation of **AGAPPSPSPGR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1169.5230

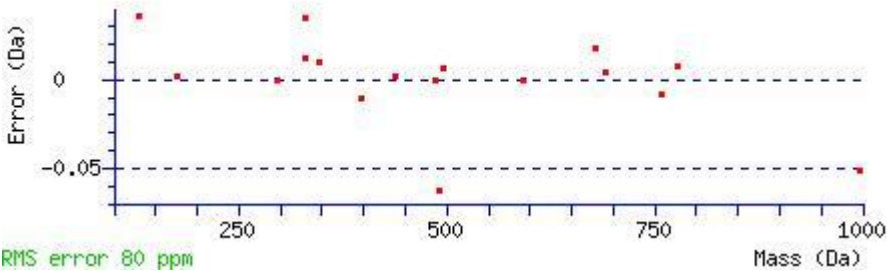
Variable modifications:

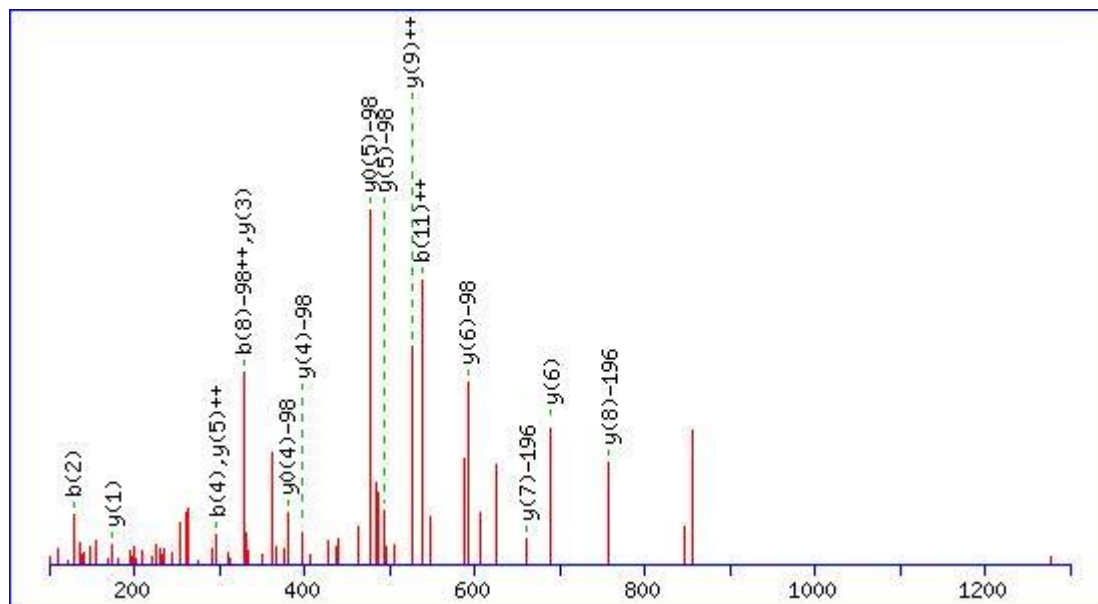
S9 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 31 Expect: 1.7

Matches : 17/154 fragment ions using 31 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	72.0444	36.5258			A							12
2	129.0659	65.0366			G	1001.5163	501.2618	984.4898	492.7485	983.5057	492.2565	11
3	200.1030	100.5551			A	944.4948	472.7511	927.4683	464.2378	926.4843	463.7458	10
4	297.1557	149.0815			P	873.4577	437.2325	856.4312	428.7192	855.4472	428.2272	9
5	394.2085	197.6079			P	776.4050	388.7061	759.3784	380.1928	758.3944	379.7008	8
6	481.2405	241.1239	463.2300	232.1186	S	679.3522	340.1797	662.3257	331.6665	661.3416	331.1745	7
7	578.2933	289.6503	560.2827	280.6450	P	592.3202	296.6637	575.2936	288.1504	574.3096	287.6584	6
8	675.3461	338.1767	657.3355	329.1714	P	495.2674	248.1373	478.2409	239.6241	477.2568	239.1321	5
9	744.3675	372.6874	726.3569	363.6821	S	398.2146	199.6110	381.1881	191.0977	380.2041	190.6057	4
10	841.4203	421.2138	823.4097	412.2085	P	329.1932	165.1002	312.1666	156.5870			3
11	898.4417	449.7245	880.4312	440.7192	G	232.1404	116.5738	215.1139	108.0606			2
12					R	175.1190	88.0631	158.0924	79.5498			1



10_MS/MS Fragmentation of **AGAPPSPSPGR**Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4

Monoisotopic mass of neutral peptide Mr(calc): 1249.4893

Variable modifications:

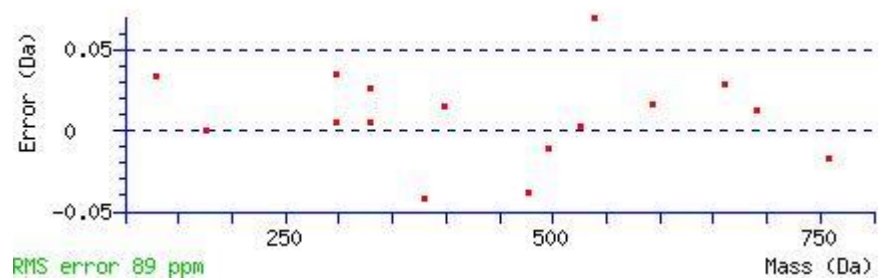
S6 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

S9 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

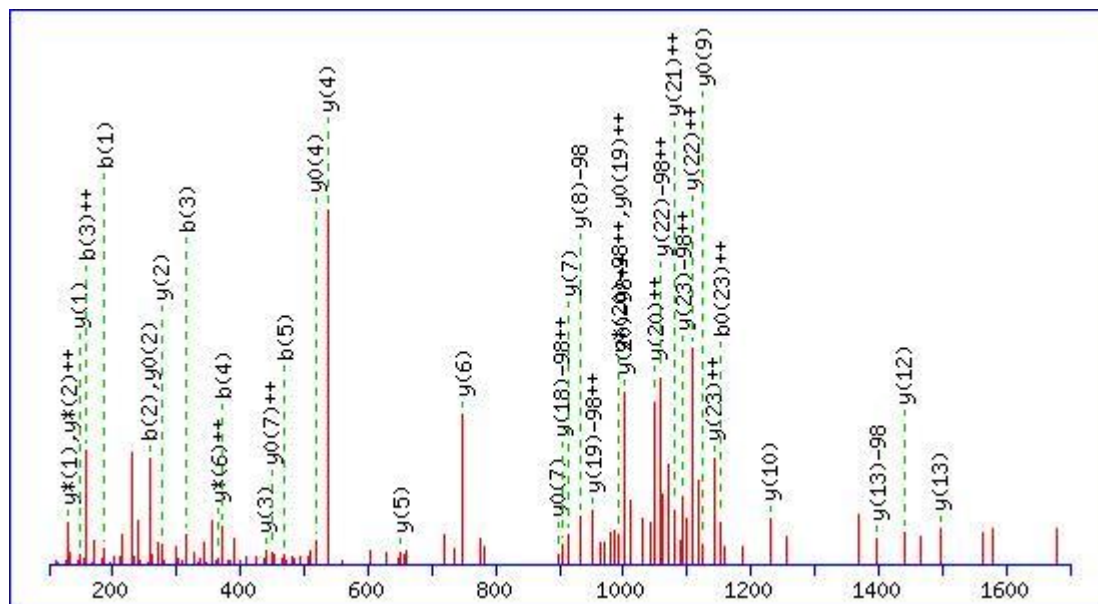
Ions Score: 35 Expect: 0.52

Matches : 16/166 fragment ions using 27 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	72.0444	36.5258			A							12
2	129.0659	65.0366			G	983.5057	492.2565	966.4792	483.7432	965.4952	483.2512	11
3	200.1030	100.5551			A	926.4843	463.7458	909.4577	455.2325	908.4737	454.7405	10
4	297.1557	149.0815			P	855.4472	428.2272	838.4206	419.7139	837.4366	419.2219	9
5	394.2085	197.6079			P	758.3944	379.7008	741.3678	371.1876	740.3838	370.6956	8
6	463.2300	232.1186	445.2194	223.1133	S	661.3416	331.1745	644.3151	322.6612	643.3311	322.1692	7
7	560.2827	280.6450	542.2722	271.6397	P	592.3202	296.6637	575.2936	288.1504	574.3096	287.6584	6
8	657.3355	329.1714	639.3249	320.1661	P	495.2674	248.1373	478.2409	239.6241	477.2568	239.1321	5
9	726.3569	363.6821	708.3464	354.6768	S	398.2146	199.6110	381.1881	191.0977	380.2041	190.6057	4
10	823.4097	412.2085	805.3991	403.2032	P	329.1932	165.1002	312.1666	156.5870			3
11	880.4312	440.7192	862.4206	431.7139	G	232.1404	116.5738	215.1139	108.0606			2
12					R	175.1190	88.0631	158.0924	79.5498			1



Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



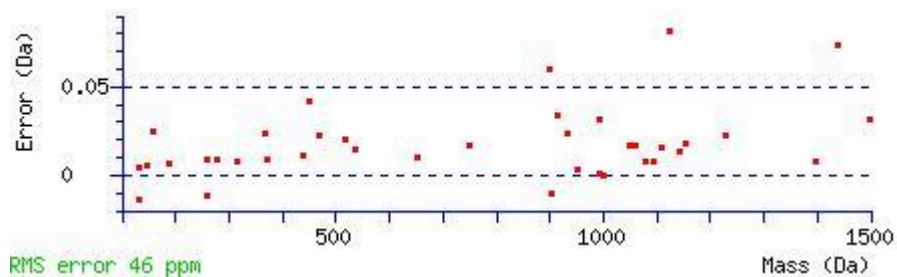
Variable modifications:

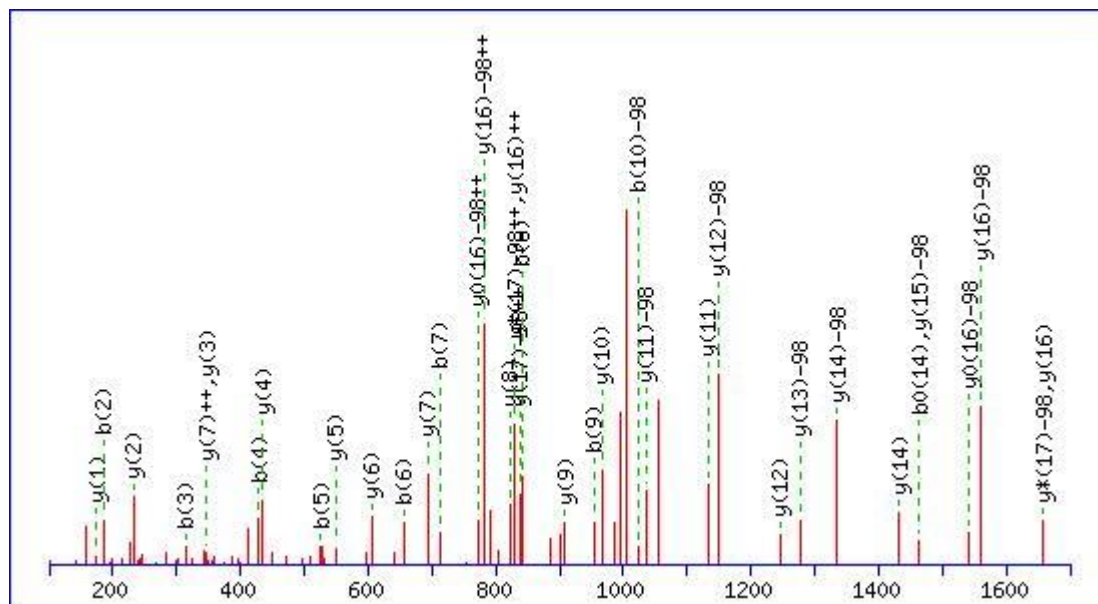
Ions Score: 40 Expect: 0.3

Matches : 38/366 fragment ions using 81 most intense peaks ([help](#))

#	b	b⁺⁺	b[*]	b^{*++}	b⁰	b⁰⁺⁺	Seq .	y	y⁺⁺	y[*]	y^{*++}	y⁰	y⁰⁺⁺	#
1	187.086 6	94.0469					W							24
2	258.123 7	129.565 5					A	2285.02 34	1143.01 53	2267.99 69	1134.50 21	2267.01 29	1134.01 01	23
3	315.145 2	158.076 2					G	2213.98 63	1107.49 68	2196.95 98	1098.98 35	2195.97 57	1098.49 15	22
4	372.166 6	186.587 0					G	2156.96 48	1078.98 61	2139.93 83	1070.47 28	2138.95 43	1069.98 08	21
5	469.219 4	235.113 3					P	2099.94 34	1050.47 53	2082.91 68	1041.96 21	2081.93 28	1041.47 00	20
6	566.272 2	283.639 7					P	2002.89 06	1001.94 89	1985.86 41	993.435 7	1984.88 00	992.943 7	19
7	623.293 6	312.150 4					G	1905.83 79	953.422 6	1888.81 13	944.909 3	1887.82 73	944.417 3	18
8	724.341 3	362.674 3			706.330 7	353.669 0	T	1848.81 64	924.911 8	1831.78 98	916.398 6	1830.80 58	915.906 5	17
9	781.362 8	391.185 0			763.352 2	382.179 7	G	1747.76 87	874.388 0	1730.74 22	865.874 7	1729.75 81	865.382 7	16

10	838.384 2	419.695 8			820.373 7	410.690 5	G	1690.74 72	845.877 3	1673.72 07	837.364 0	1672.73 67	836.872 0	15
11	975.443 1	488.225 2			957.432 6	479.219 9	H	1633.72 58	817.366 5	1616.69 92	808.853 3	1615.71 52	808.361 2	14
12	1032.46 46	516.735 9			1014.45 40	507.730 7	G	1496.66 69	748.837 1	1479.64 03	740.323 8	1478.65 63	739.831 8	13
13	1129.51 74	565.262 3			1111.506 8	556.257 0	P	1439.64 54	720.326 3	1422.61 89	711.813 1	1421.63 48	711.3211	12
14	1242.60 14	621.804 4			1224.59 09	612.799 1	L	1342.59 26	671.800 0	1325.56 61	663.286 7	1324.58 21	662.794 7	11
15	1329.63 35	665.320 4			1311.62 29	656.315 1	S	1229.50 86	615.257 9	1212.48 20	606.744 7	1211.49 80	606.252 6	10
16	1442.71 75	721.862 4			1424.70 70	712.857 1	L	1142.47 65	571.741 9	1125.45 00	563.228 6	1124.46 60	562.736 6	9
17	1556.76 05	778.883 9	1539.73 39	770.370 6	1538.74 99	769.878 6	N	1029.39 25	515.199 9	1012.36 59	506.686 6	1011.38 19	506.194 6	8
18	1723.75 88	862.383 0	1706.73 23	853.869 8	1705.74 82	853.377 8	S	915.349 6	458.178 4	898.323 0	449.665 1	897.339 0	449.173 1	7
19	1820.81 16	910.909 4	1803.78 50	902.396 2	1802.80 10	901.904 1	P	748.351 2	374.679 2	731.324 6	366.166 0	730.340 6	365.674 0	6
20	1935.83 85	968.422 9	1918.81 20	959.909 6	1917.82 80	959.417 6	D	651.298 4	326.152 9	634.271 9	317.639 6	633.287 9	317.147 6	5
21	2032.89 13	1016.94 93	2015.86 47	1008.43 60	2014.88 07	1007.94 40	P	536.271 5	268.639 4	519.244 9	260.126 1	518.260 9	259.634 1	4
22	2195.95 46	1098.48 09	2178.92 81	1089.96 77	2177.94 40	1089.47 57	Y	439.218 7	220.113 0	422.192 2	211.599 7	421.208 2	211.107 7	3
23	2324.99 72	1163.00 22	2307.97 07	1154.48 90	2306.98 66	1153.99 70	E	276.155 4	138.581 3	259.128 8	130.068 1	258.144 8	129.576 1	2
24							K	147.112 8	74.0600	130.086 3	65.5468			1



12_MS/MS Fragmentation of **ALEDPEGELSGSESGDSDGR**Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4

Monoisotopic mass of neutral peptide Mr(calc): 2085.8012

Variable modifications:

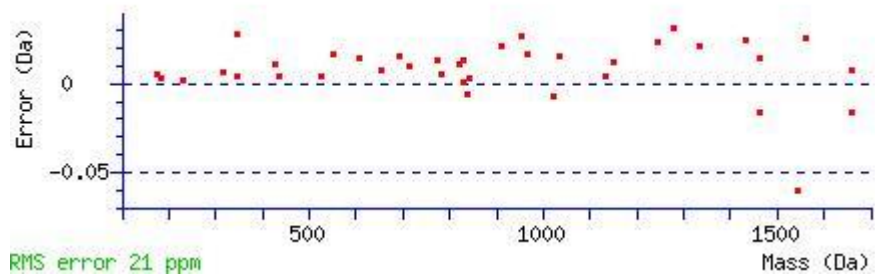
S10 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 128 Expect: 2.7e-010

Matches : 38/276 fragment ions using 50 most intense peaks ([help](#))

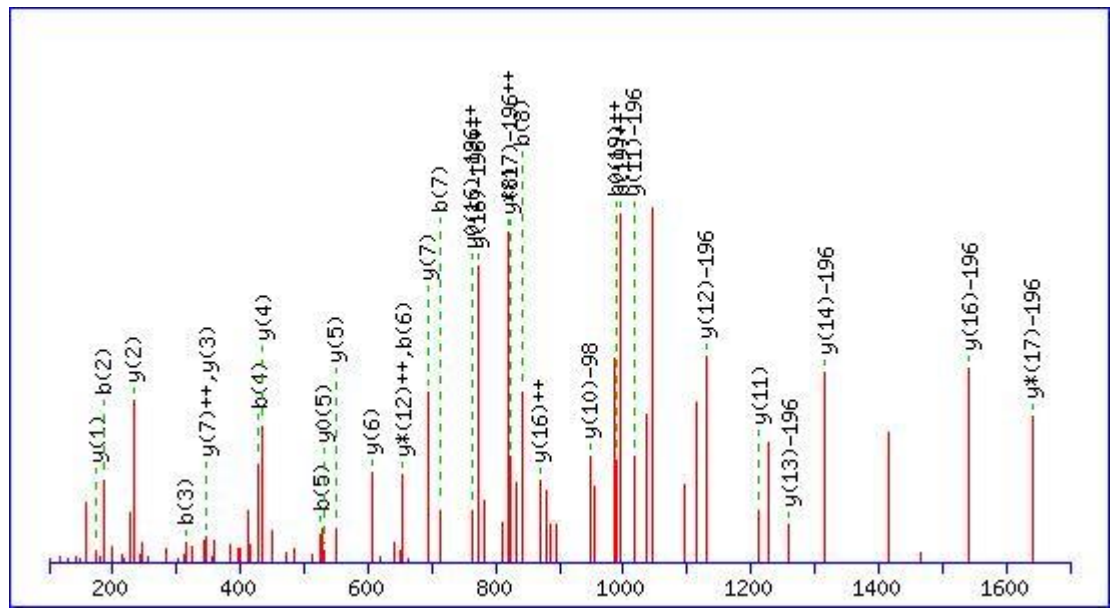
#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	72.0444	36.5258			A							20
2	185.1285	93.0679			L	1917.7944	959.4009	1900.7679	950.8876	1899.7839	950.3956	19
3	314.1710	157.5892	296.1605	148.5839	E	1804.7104	902.8588	1787.6838	894.3456	1786.6998	893.8535	18
4	429.1980	215.1026	411.1874	206.0974	D	1675.6678	838.3375	1658.6412	829.8243	1657.6572	829.3323	17
5	526.2508	263.6290	508.2402	254.6237	P	1560.6408	780.8241	1543.6143	772.3108	1542.6303	771.8188	16
6	655.2933	328.1503	637.2828	319.1450	E	1463.5881	732.2977	1446.5615	723.7844	1445.5775	723.2924	15
7	712.3148	356.6610	694.3042	347.6558	G	1334.5455	667.7764	1317.5189	659.2631	1316.5349	658.7711	14
8	841.3574	421.1823	823.3468	412.1771	E	1277.5240	639.2657	1260.4975	630.7524	1259.5135	630.2604	13
9	954.4415	477.7244	936.4309	468.7191	L	1148.4814	574.7444	1131.4549	566.2311	1130.4709	565.7391	12
10	1023.4629	512.2351	1005.4524	503.2298	S	1035.3974	518.2023	1018.3708	509.6890	1017.3868	509.1970	11
11	1080.4844	540.7458	1062.4738	531.7406	G	966.3759	483.6916	949.3494	475.1783	948.3653	474.6863	10
12	1167.5164	584.2618	1149.5059	575.2566	S	909.3544	455.1809	892.3279	446.6676	891.3439	446.1756	9
13	1296.5590	648.7831	1278.5485	639.7779	E	822.3224	411.6648	805.2959	403.1516	804.3119	402.6596	8
14	1383.5910	692.2992	1365.5805	683.2939	S	693.2798	347.1435	676.2533	338.6303	675.2693	338.1383	7
15	1440.6125	720.8099	1422.6019	711.8046	G	606.2478	303.6275	589.2212	295.1143	588.2372	294.6223	6
16	1555.6395	778.3234	1537.6289	769.3181	D	549.2263	275.1168	532.1998	266.6035	531.2158	266.1115	5
17	1642.6715	821.8394	1624.6609	812.8341	S	434.1994	217.6033	417.1728	209.0901	416.1888	208.5980	4

18	1757.6984	879.3528	1739.6879	870.3476	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
19	1814.7199	907.8636	1796.7093	898.8583	G	232.1404	116.5738	215.1139	108.0606			2
20					R	175.1190	88.0631	158.0924	79.5498			1



13_MS/MS Fragmentation of **ALEDPEGELSGSESGDSDGR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 2165.7675

Variable modifications:

S10 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

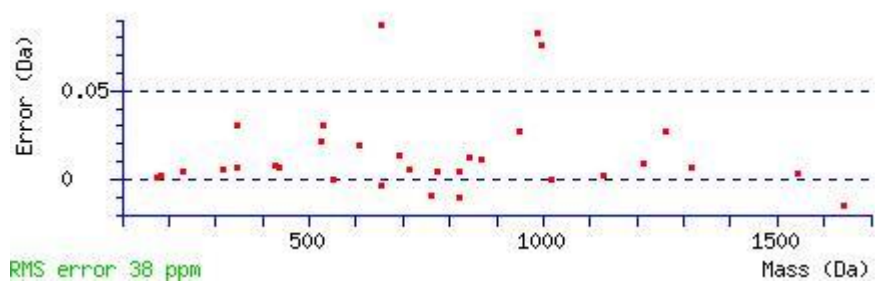
S12 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

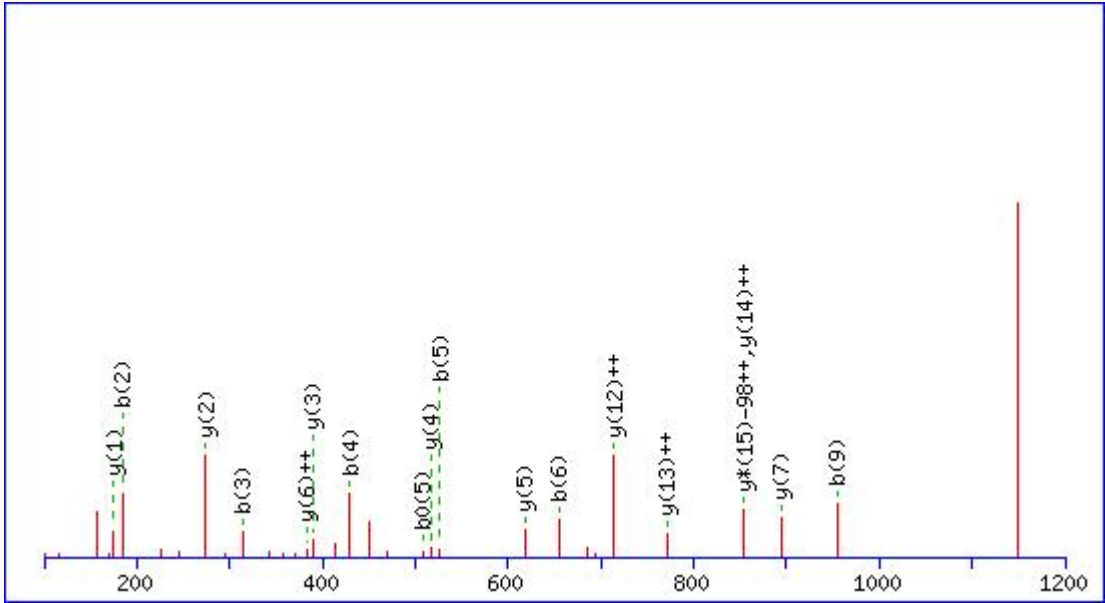
Ions Score: 93 Expect: 6.1e-007

Matches : 32/288 fragment ions using 50 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	72.0444	36.5258			A							20
2	185.1285	93.0679			L	1899.7839	950.3956	1882.7573	941.8823	1881.7733	941.3903	19
3	314.1710	157.5892	296.1605	148.5839	E	1786.6998	893.8535	1769.6733	885.3403	1768.6893	884.8483	18
4	429.1980	215.1026	411.1874	206.0974	D	1657.6572	829.3323	1640.6307	820.8190	1639.6467	820.3270	17
5	526.2508	263.6290	508.2402	254.6237	P	1542.6303	771.8188	1525.6037	763.3055	1524.6197	762.8135	16
6	655.2933	328.1503	637.2828	319.1450	E	1445.5775	723.2924	1428.5510	714.7791	1427.5670	714.2871	15
7	712.3148	356.6610	694.3042	347.6558	G	1316.5349	658.7711	1299.5084	650.2578	1298.5244	649.7658	14
8	841.3574	421.1823	823.3468	412.1771	E	1259.5135	630.2604	1242.4869	621.7471	1241.5029	621.2551	13
9	954.4415	477.7244	936.4309	468.7191	L	1130.4709	565.7391	1113.4443	557.2258	1112.4603	556.7338	12
10	1023.4629	512.2351	1005.4524	503.2298	S	1017.3868	509.1970	1000.3603	500.6838	999.3762	500.1918	11
11	1080.4844	540.7458	1062.4738	531.7406	G	948.3653	474.6863	931.3388	466.1730	930.3548	465.6810	10
12	1149.5059	575.2566	1131.4953	566.2513	S	891.3439	446.1756	874.3173	437.6623	873.3333	437.1703	9
13	1278.5485	639.7779	1260.5379	630.7726	E	822.3224	411.6648	805.2959	403.1516	804.3119	402.6596	8
14	1365.5805	683.2939	1347.5699	674.2886	S	693.2798	347.1435	676.2533	338.6303	675.2693	338.1383	7
15	1422.6019	711.8046	1404.5914	702.7993	G	606.2478	303.6275	589.2212	295.1143	588.2372	294.6223	6
16	1537.6289	769.3181	1519.6183	760.3128	D	549.2263	275.1168	532.1998	266.6035	531.2158	266.1115	5
17	1624.6609	812.8341	1606.6503	803.8288	S	434.1994	217.6033	417.1728	209.0901	416.1888	208.5980	4

18	1739.6879	870.3476	1721.6773	861.3423	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
19	1796.7093	898.8583	1778.6988	889.8530	G	232.1404	116.5738	215.1139	108.0606			2
20					R	175.1190	88.0631	158.0924	79.5498			1





Monoisotopic mass of neutral peptide Mr(calc): 3520.2671

Variable modifications:

- S10 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769
- S12 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769
- S14 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769
- S17 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

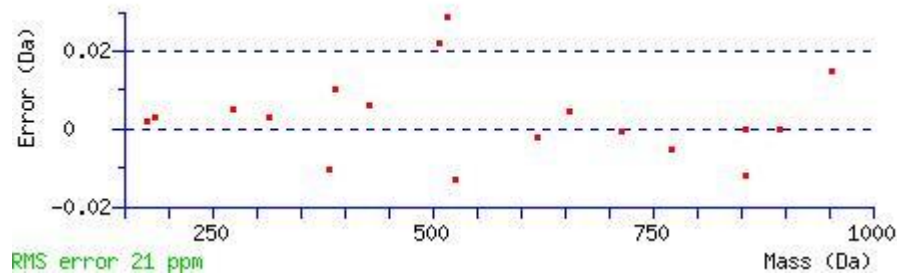
Ions Score: 54 Expect: 0.0059

Matches : 18/498 fragment ions using 24 most intense peaks ([help](#))

#	b	b ⁺⁺	b [*]	b ⁺⁺⁺	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ⁺⁺⁺	y ⁰	y ⁰⁺⁺	#
1	72.0444	36.5258					A							30
2	185.1285	93.0679					L	3450.2373	1725.6223	3433.2107	1717.1090	3432.2267	1716.6170	29
3	314.1710	157.5892			296.1605	148.5839	E	3337.1532	1669.0802	3320.1267	1660.5670	3319.1426	1660.0750	28
4	429.1980	215.1026			411.1874	206.0974	D	3208.1106	1604.5589	3191.0841	1596.0457	3190.1001	1595.5537	27
5	526.2508	263.6290			508.2402	254.6237	P	3093.0837	1547.0455	3076.0571	1538.5322	3075.0731	1538.0402	26
6	655.2933	328.1503			637.2828	319.1450	E	2996.0309	1498.5191	2979.0044	1490.0058	2978.0203	1489.5138	25
7	712.3148	356.6610			694.3042	347.6558	G	2866.9883	1433.9978	2849.9618	1425.4845	2848.9778	1424.9925	24
8	841.3574	421.1823			823.3468	412.1771	E	2809.9669	1405.4871	2792.9403	1396.9738	2791.9563	1396.4818	23

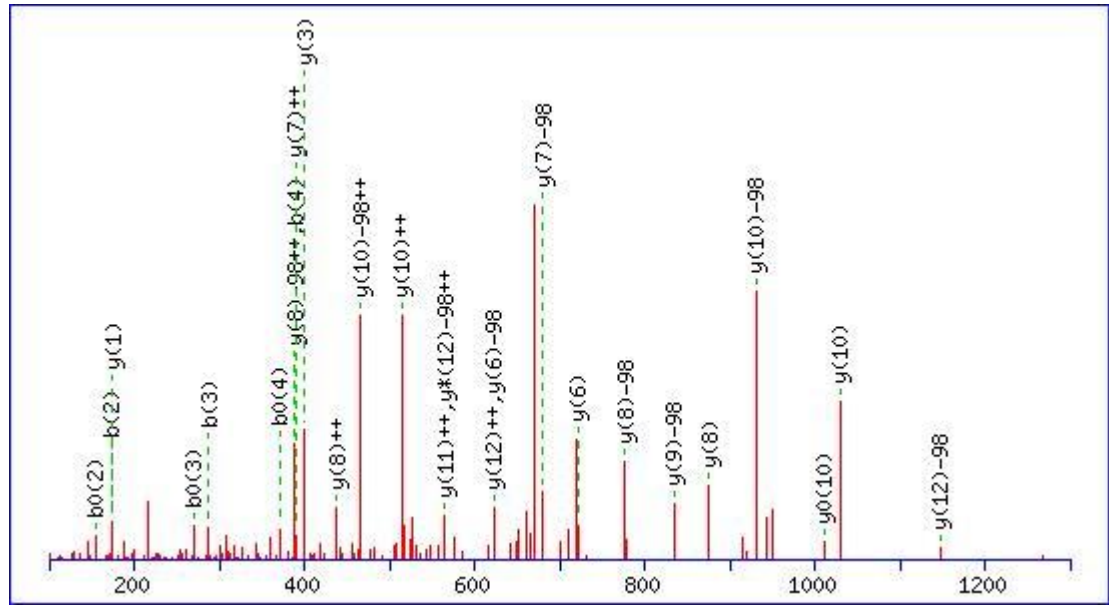
9	954.441 5	477.724 4			936.430 9	468.719 1	L	2680.92 43	1340.96 58	2663.89 77	1332.45 25	2662.91 37	1331.96 05	2 2
1 0	1121.43 98	561.223 6			1103.42 93	552.218 3	S	2567.84 02	1284.42 37	2550.81 36	1275.91 05	2549.82 96	1275.41 85	2 1
1 1	1178.46 13	589.734 3			1160.45 07	580.729 0	G	2400.84 18	1200.92 46	2383.81 53	1192.411 3	2382.83 13	1191.91 93	2 0
1 2	1345.45 97	673.233 5			1327.44 91	664.228 2	S	2343.82 04	1172.41 38	2326.79 38	1163.90 06	2325.80 98	1163.40 85	1 9
1 3	1474.50 22	737.754 8			1456.49 17	728.749 5	E	2176.82 20	1088.91 46	2159.79 55	1080.40 14	2158.81 15	1079.90 94	1 8
1 4	1641.50 06	821.253 9			1623.49 00	812.248 7	S	2047.77 94	1024.39 33	2030.75 29	1015.88 01	2029.76 89	1015.38 81	1 7
1 5	1698.52 21	849.764 7			1680.51 15	840.759 4	G	1880.78 11	940.894 2	1863.75 45	932.380 9	1862.77 05	931.888 9	1 6
1 6	1813.54 90	907.278 1			1795.53 84	898.272 9	D	1823.75 96	912.383 4	1806.73 31	903.870 2	1805.74 90	903.378 2	1 5
1 7	1980.54 74	990.777 3			1962.53 68	981.772 0	S	1708.73 27	854.870 0	1691.70 61	846.356 7	1690.72 21	845.864 7	1 4
1 8	2095.57 43	1048.29 08			2077.56 37	1039.28 55	D	1541.73 43	771.370 8	1524.70 77	762.857 5	1523.72 37	762.365 5	1 3
1 9	2152.59 58	1076.80 15			2134.58 52	1067.79 62	G	1426.70 74	713.857 3	1409.68 08	705.344 0	1408.69 68	704.852 0	1 2
2 0	2308.69 69	1154.85 21	2291.67 03	1146.33 88	2290.68 63	1145.84 68	R	1369.68 59	685.346 6	1352.65 93	676.833 3	1351.67 53	676.341 3	1 1
2 1	2365.71 84	1183.36 28	2348.69 18	1174.84 95	2347.70 78	1174.35 75	G	1213.58 48	607.296 0	1196.55 82	598.782 8	1195.57 42	598.290 7	1 0
2 2	2464.78 68	1232.89 70	2447.76 02	1224.38 37	2446.77 62	1223.89 17	V	1156.56 33	578.785 3	1139.53 68	570.272 0	1138.55 28	569.780 0	9
2 3	2627.85 01	1314.42 87	2610.82 35	1305.91 54	2609.83 95	1305.42 34	Y	1057.49 49	529.251 1	1040.46 84	520.737 8	1039.48 43	520.245 8	8
2 4	2756.89 27	1378.95 00	2739.86 61	1370.43 67	2738.88 21	1369.94 47	E	894.431 6	447.719 4	877.405 0	439.206 1	876.421 0	438.714 1	7
2 5	2903.96 11	1452.48 42	2886.93 46	1443.97 09	2885.95 05	1443.47 89	F	765.389 0	383.198 1	748.362 4	374.684 9	747.378 4	374.192 8	6
2 6	3005.00 88	1503.00 80	2987.98 22	1494.49 48	2986.99 82	1494.00 27	T	618.320 6	309.663 9	601.294 0	301.150 6	600.310 0	300.658 6	5
2 7	3133.06 74	1567.03 73	3116.04 08	1558.52 40	3115.05 68	1558.03 20	Q	517.272 9	259.140 1	500.246 3	250.626 8	499.262 3	250.134 8	4

28	3248.0943	1624.5508	3231.0678	1616.0375	3230.0837	1615.5455	D	389.2143	195.1108	372.1878	186.5975	371.2037	186.1055	3
29	3347.1627	1674.0850	3330.1362	1665.5717	3329.1521	1665.0797	V	274.1874	137.5973	257.1608	129.0840			2
30							R	175.1190	88.0631	158.0924	79.5498			1



15_MS/MS Fragmentation of **ATDTPGPGPGSPQR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1416.6035

Variable modifications:

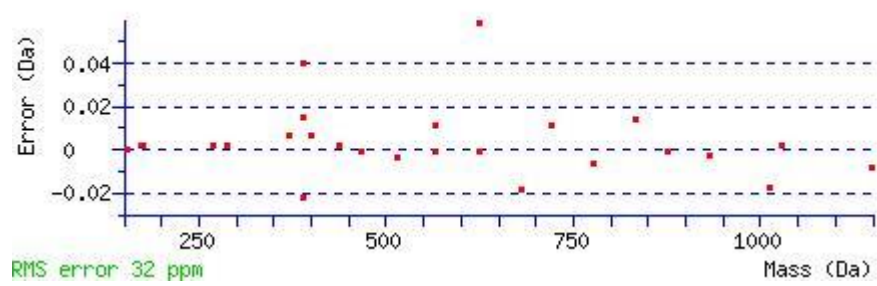
S11 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 47 Expect: 0.039

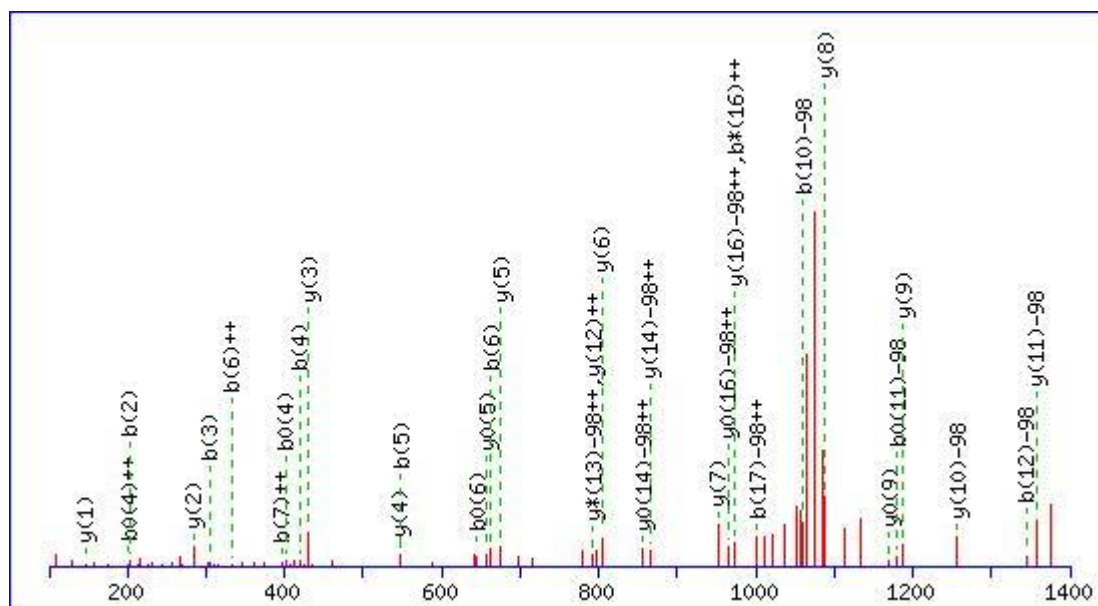
Matches : 26/198 fragment ions using 30 most intense peaks ([help](#))

#	b	b ⁺⁺	b [*]	b ^{***}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	72.0444	36.5258					A							1
2	173.0921	87.0497			155.0815	78.0444	T	1248.596 7	624.802 0	1231.570 2	616.288 7	1230.586 2	615.796 7	1
3	288.1190	144.563 1			270.1084	135.557 9	D	1147.549 1	574.278 2	1130.522 5	565.764 9	1129.538 5	565.272 9	1
4	389.1667	195.087 0			371.1561	186.081 7	T	1032.522 1	516.764 7	1015.495 6	508.251 4	1014.511 6	507.759 4	1
5	486.2195	243.613 4			468.2089	234.608 1	P	931.4744	466.240 9	914.4479	457.727 6	913.4639	457.235 6	1
6	543.2409	272.124 1			525.2304	263.118 8	G	834.4217	417.714 5	817.3951	409.201 2	816.4111	408.709 2	9
7	640.2937	320.650 5			622.2831	311.645 2	P	777.4002	389.203 7	760.3737	380.690 5	759.3896	380.198 5	8
8	697.3151	349.161 2			679.3046	340.155 9	G	680.3474	340.677 4	663.3209	332.164 1	662.3369	331.672 1	7
9	794.3679	397.687 6			776.3573	388.682 3	P	623.3260	312.166 6	606.2994	303.653 4	605.3154	303.161 3	6

10	851.3894	426.1983			833.3788	417.1930	G	526.2732	263.6402	509.2467	255.1270	508.2627	254.6350	5
11	920.4108	460.7091			902.4003	451.7038	S	469.2518	235.1295	452.2252	226.6162	451.2412	226.1242	4
12	1017.4636	509.2354			999.4530	500.2302	P	400.2303	200.6188	383.2037	192.1055			3
13	1145.5222	573.2647	1128.4956	564.7515	1127.5116	564.2594	Q	303.1775	152.0924	286.1510	143.5791			2
14							R	175.1190	88.0631	158.0924	79.5498			1



Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



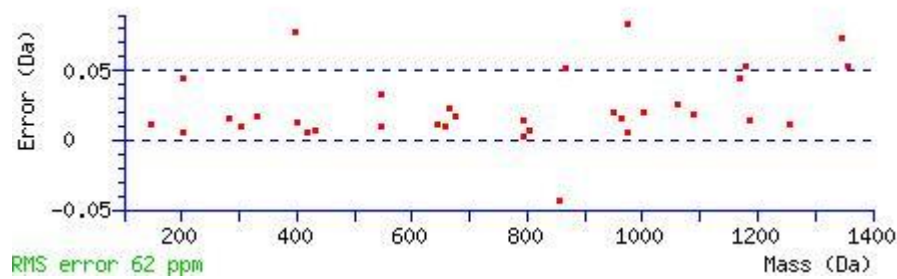
Variable modifications:

Ions Score: 69 Expect: 0.00029

Matches : 34/288 fragment ions using 63 most intense peaks ([help](#))

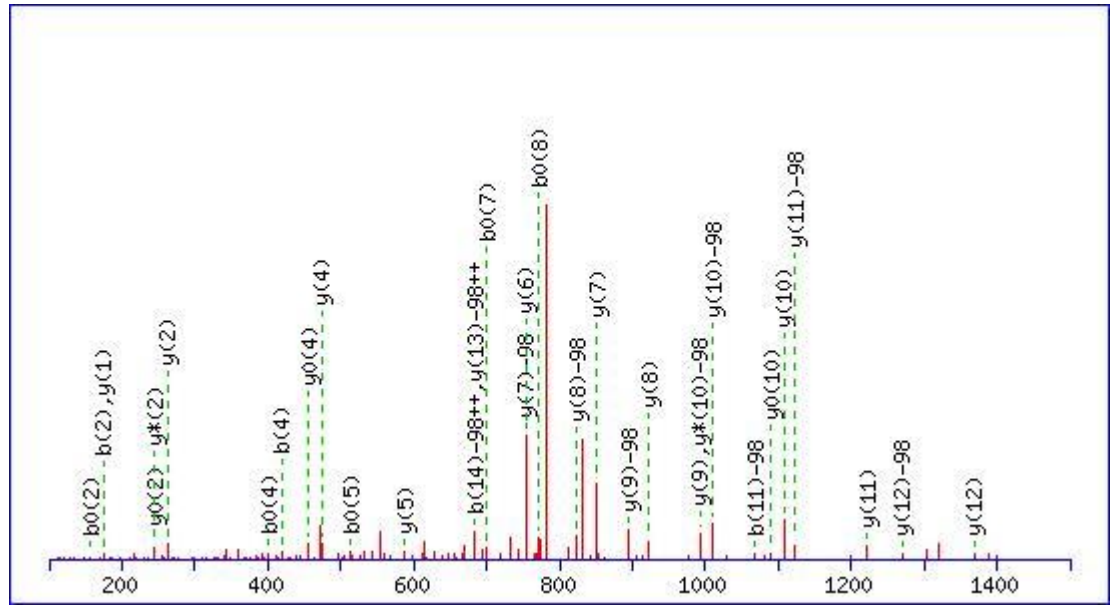
#	b	b⁺⁺	b*	b^{*++}	b⁰	b⁰⁺⁺	Seq .	y	y⁺⁺	y*	y^{*++}	y⁰	y⁰⁺⁺	#
1	88.0393	44.5233			70.0287	35.5180	S							18
2	203.0662	102.0368			185.0557	93.0315	D	2060.883 2	1030.945 2	2043.856 7	1022.432 0	2042.872 6	1021.940 0	17
3	304.1139	152.5606			286.1034	143.555 3	T	1945.856 3	973.4318	1928.829 7	964.9185	1927.845 7	964.4265	16
4	419.1409	210.0741			401.1303	201.068 8	D	1844.808 6	922.9079	1827.782 0	914.3947	1826.798 0	913.9026	15
5	548.1835	274.5954			530.1729	265.590 1	E	1729.781 6	865.3945	1712.755 1	856.8812	1711.771 1	856.3892	14
6	663.2104	332.1088			645.1998	323.103 6	D	1600.739 0	800.8732	1583.712 5	792.3599	1582.728 5	791.8679	13
7	791.3054	396.1563	774.2788	387.643 0	773.2948	387.151 0	K	1485.712 1	743.3597	1468.685 6	734.8464	1467.701 5	734.3544	12
8	892.3530	446.6802	875.3265	438.166 9	874.3425	437.674 9	T	1357.617 1	679.3122	1340.590 6	670.7989	1339.606 6	670.3069	11
9	961.3745	481.1909	944.3480	472.677 6	943.3639	472.185 6	S	1256.569 5	628.7884	1239.542 9	620.2751	1238.558 9	619.7831	10

10	1060.4429	530.7251	1043.4164	522.2118	1042.4324	521.7198	V	1187.5480	594.2776	1170.5215	585.7644	1169.5374	585.2724	9
11	1197.5018	599.2546	1180.4753	590.7413	1179.4913	590.2493	H	1088.4796	544.7434	1071.4530	536.2302	1070.4690	535.7381	8
12	1344.5703	672.7888	1327.5437	664.2755	1326.5597	663.7835	F	951.4207	476.2140	934.3941	467.7007	933.4101	467.2087	7
13	1473.6128	737.3101	1456.5863	728.7968	1455.6023	728.3048	E	804.3523	402.6798	787.3257	394.1665	786.3417	393.6745	6
14	1602.6554	801.8314	1585.6289	793.3181	1584.6449	792.8261	E	675.3097	338.1585	658.2831	329.6452	657.2991	329.1532	5
15	1717.6824	859.3448	1700.6558	850.8316	1699.6718	850.3395	D	546.2671	273.6372	529.2405	265.1239	528.2565	264.6319	4
16	1864.7508	932.8790	1847.7242	924.3658	1846.7402	923.8738	F	431.2401	216.1237	414.2136	207.6104			3
17	2001.8097	1001.4085	1984.7832	992.8952	1983.7991	992.4032	H	284.1717	142.5895	267.1452	134.0762			2
18							K	147.1128	74.0600	130.0863	65.5468			1



17_MS/MS Fragmentation of **SSPFLDAAPSLPDSR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1638.7290

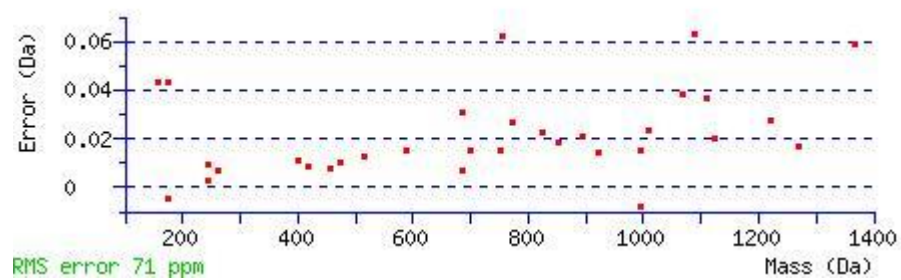
Variable modifications:

S10 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

Ions Score: 74 Expect: 9.5e-005

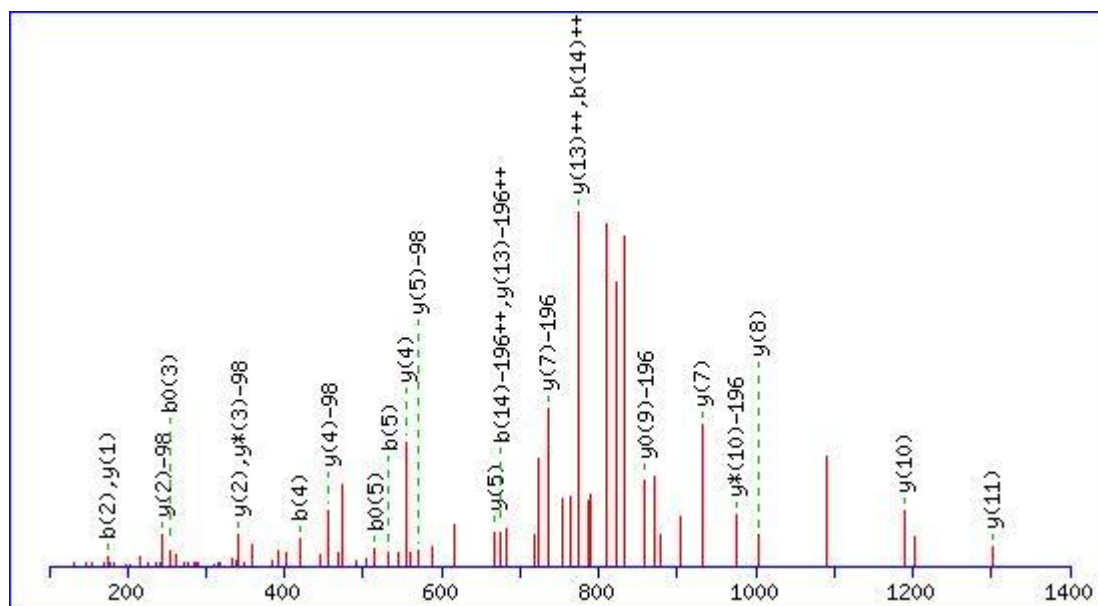
Matches : 32/212 fragment ions using 49 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	88.0393	44.5233	70.0287	35.5180	S							15
2	175.0713	88.0393	157.0608	79.0340	S	1552.7043	776.8558	1535.6778	768.3425	1534.6937	767.8505	14
3	272.1241	136.5657	254.1135	127.5604	P	1465.6723	733.3398	1448.6457	724.8265	1447.6617	724.3345	13
4	419.1925	210.0999	401.1819	201.0946	F	1368.6195	684.8134	1351.5930	676.3001	1350.6090	675.8081	12
5	532.2766	266.6419	514.2660	257.6366	L	1221.5511	611.2792	1204.5246	602.7659	1203.5405	602.2739	11
6	647.3035	324.1554	629.2930	315.1501	D	1108.4670	554.7372	1091.4405	546.2239	1090.4565	545.7319	10
7	718.3406	359.6740	700.3301	350.6687	A	993.4401	497.2237	976.4136	488.7104	975.4295	488.2184	9
8	789.3777	395.1925	771.3672	386.1872	A	922.4030	461.7051	905.3764	453.1919	904.3924	452.6998	8
9	886.4305	443.7189	868.4199	434.7136	P	851.3659	426.1866	834.3393	417.6733	833.3553	417.1813	7
10	1053.4289	527.2181	1035.4183	518.2128	S	754.3131	377.6602	737.2866	369.1469	736.3025	368.6549	6
11	1166.5129	583.7601	1148.5024	574.7548	L	587.3148	294.1610	570.2882	285.6477	569.3042	285.1557	5
12	1263.5657	632.2865	1245.5551	623.2812	P	474.2307	237.6190	457.2041	229.1057	456.2201	228.6137	4
13	1378.5926	689.8000	1360.5821	680.7947	D	377.1779	189.0926	360.1514	180.5793	359.1674	180.0873	3
14	1465.6247	733.3160	1447.6141	724.3107	S	262.1510	131.5791	245.1244	123.0659	244.1404	122.5738	2
15					R	175.1190	88.0631	158.0924	79.5498			1



18_MS/MS Fragmentation of **SSPFLDAAPSLPDSR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1718.6954

Variable modifications:

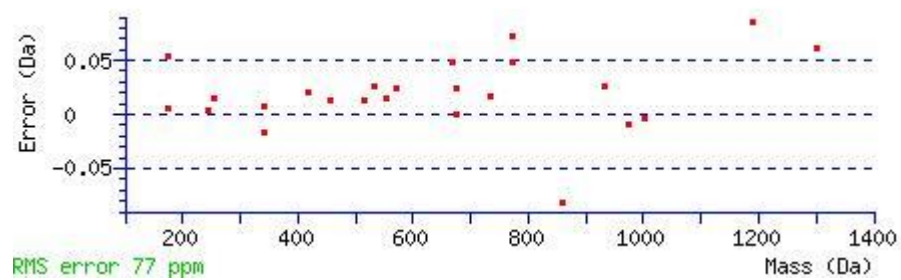
S10 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

S14 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

Ions Score: 36 Expect: 0.54

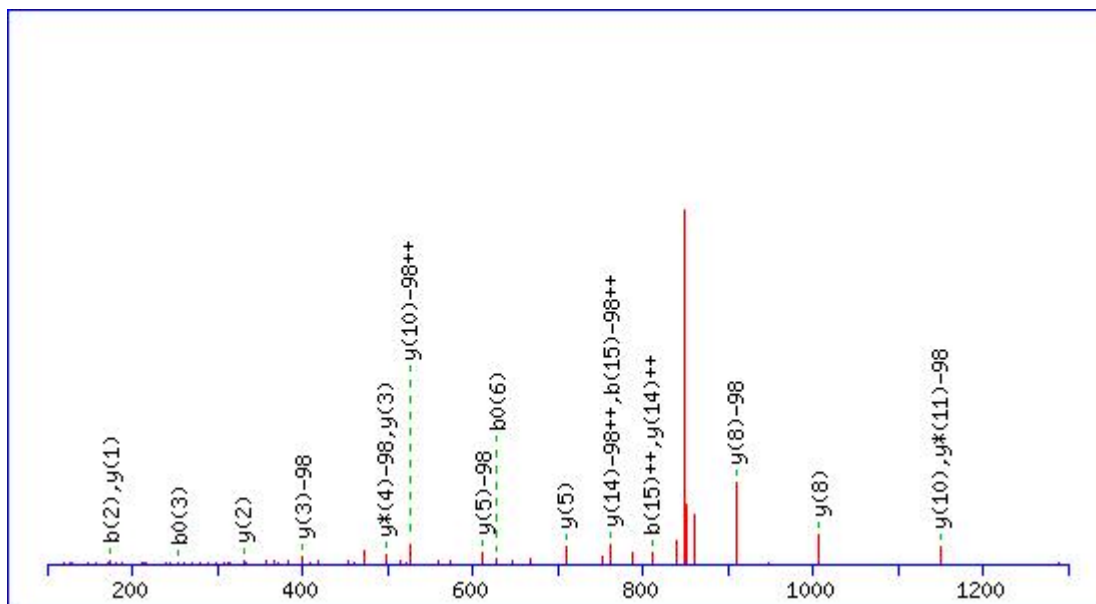
Matches : 24/236 fragment ions using 38 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	88.0393	44.5233	70.0287	35.5180	S							15
2	175.0713	88.0393	157.0608	79.0340	S	1632.6706	816.8390	1615.6441	808.3257	1614.6601	807.8337	14
3	272.1241	136.5657	254.1135	127.5604	P	1545.6386	773.3229	1528.6121	764.8097	1527.6281	764.3177	13
4	419.1925	210.0999	401.1819	201.0946	F	1448.5859	724.7966	1431.5593	716.2833	1430.5753	715.7913	12
5	532.2766	266.6419	514.2660	257.6366	L	1301.5174	651.2624	1284.4909	642.7491	1283.5069	642.2571	11
6	647.3035	324.1554	629.2930	315.1501	D	1188.4334	594.7203	1171.4068	586.2071	1170.4228	585.7150	10
7	718.3406	359.6740	700.3301	350.6687	A	1073.4064	537.2069	1056.3799	528.6936	1055.3959	528.2016	9
8	789.3777	395.1925	771.3672	386.1872	A	1002.3693	501.6883	985.3428	493.1750	984.3588	492.6830	8
9	886.4305	443.7189	868.4199	434.7136	P	931.3322	466.1697	914.3057	457.6565	913.3216	457.1645	7
10	1053.4289	527.2181	1035.4183	518.2128	S	834.2794	417.6434	817.2529	409.1301	816.2689	408.6381	6
11	1166.5129	583.7601	1148.5024	574.7548	L	667.2811	334.1442	650.2545	325.6309	649.2705	325.1389	5
12	1263.5657	632.2865	1245.5551	623.2812	P	554.1970	277.6021	537.1705	269.0889	536.1865	268.5969	4
13	1378.5926	689.8000	1360.5821	680.7947	D	457.1443	229.0758	440.1177	220.5625	439.1337	220.0705	3
14	1545.5910	773.2991	1527.5804	764.2939	S	342.1173	171.5623	325.0908	163.0490	324.1067	162.5570	2
15					R	175.1190	88.0631	158.0924	79.5498			1



19_MS/MS Fragmentation of **SSPFLDAAPSLPDSRR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1794.8302

Variable modifications:

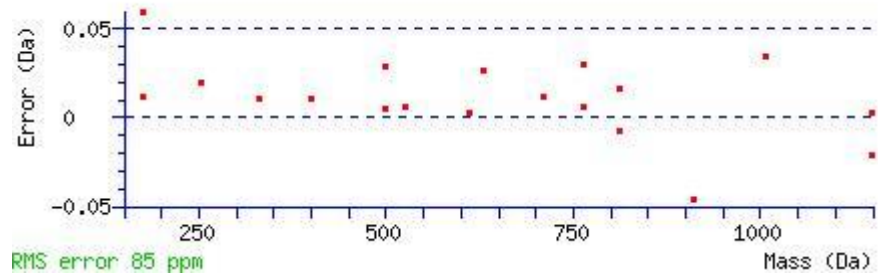
S14 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

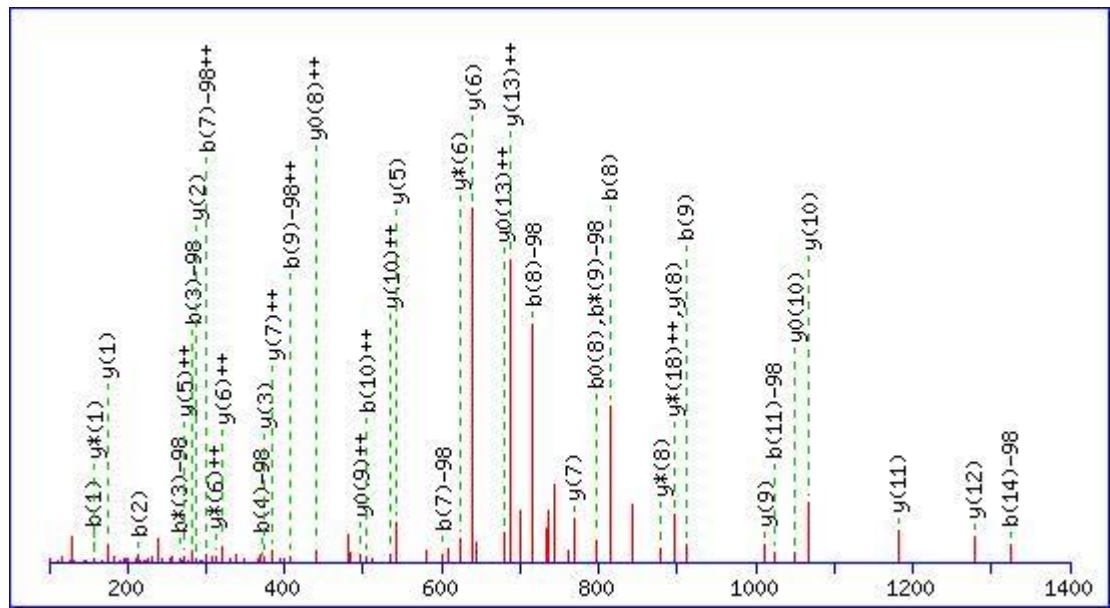
Ions Score: 41 Expect: 0.2

Matches : 19/236 fragment ions using 20 most intense peaks ([help](#))

#	b	b ⁺⁺	b [*]	b ^{*++}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	88.0393	44.5233			70.0287	35.5180	S							16
2	175.0713	88.0393			157.0608	79.0340	S	1708.805 4	854.906 4	1691.778 9	846.393 1	1690.794 9	845.901 1	15
3	272.1241	136.565 7			254.1135	127.560 4	P	1621.773 4	811.390 3	1604.746 8	802.877 1	1603.762 8	802.385 1	14
4	419.1925	210.099 9			401.1819	201.094 6	F	1524.720 6	762.864 0	1507.694 1	754.350 7	1506.710 1	753.858 7	13
5	532.2766	266.641 9			514.2660	257.636 6	L	1377.652 2	689.329 7	1360.625 7	680.816 5	1359.641 7	680.324 5	12
6	647.3035	324.155 4			629.2930	315.150 1	D	1264.568 2	632.787 7	1247.541 6	624.274 4	1246.557 6	623.782 4	11
7	718.3406	359.674 0			700.3301	350.668 7	A	1149.541 2	575.274 2	1132.514 7	566.761 0	1131.530 6	566.269 0	10
8	789.3777	395.192 5			771.3672	386.187 2	A	1078.504 1	539.755 7	1061.477 6	531.242 4	1060.493 5	530.750 4	9
9	886.4305	443.718 9			868.4199	434.713 6	P	1007.467 0	504.237 1	990.4404	495.723 9	989.4564	495.231 8	8

10	973.4625	487.2349			955.4520	478.2296	S	910.4142	455.7107	893.3877	447.1975	892.4037	446.7055	7
11	1086.5466	543.7769			1068.5360	534.7717	L	823.3822	412.1947	806.3556	403.6815	805.3716	403.1895	6
12	1183.5994	592.3033			1165.5888	583.2980	P	710.2981	355.6527	693.2716	347.1394	692.2876	346.6474	5
13	1298.6263	649.8168			1280.6157	640.8115	D	613.2454	307.1263	596.2188	298.6130	595.2348	298.1210	4
14	1465.6247	733.3160			1447.6141	724.3107	S	498.2184	249.6128	481.1919	241.0996	480.2079	240.6076	3
15	1621.7258	811.3665	1604.6992	802.8533	1603.7152	802.3612	R	331.2201	166.1137	314.1935	157.6004			2
16							R	175.1190	88.0631	158.0924	79.5498			1





Monoisotopic mass of neutral peptide Mr(calc): 2188.0274

Variable modifications:

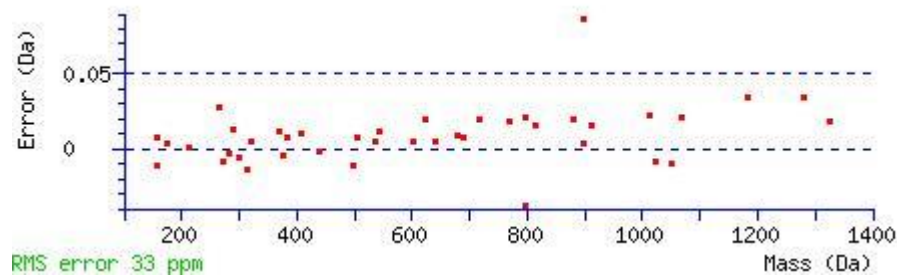
S3 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

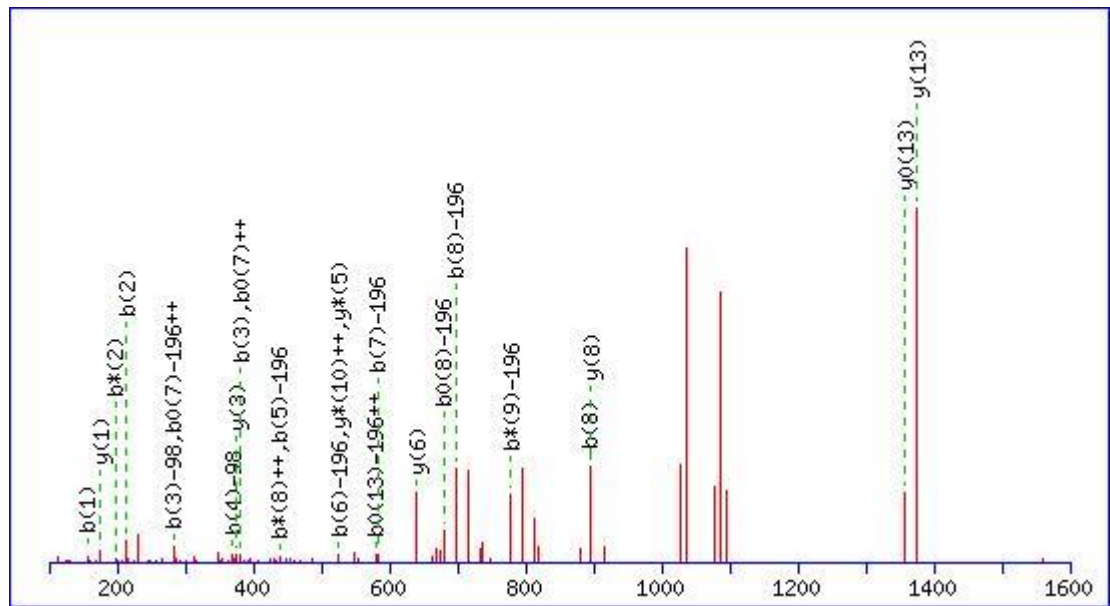
Ions Score: 77 Expect: 6.6e-005

Matches : 41/352 fragment ions using 64 most intense peaks ([help](#))

#	b	b ⁺⁺	b [*]	b ^{***}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	157.1084	79.0578	140.0818	70.5446			R							2
2	214.1299	107.568 6	197.1033	99.0553			G	1934.956 6	967.982 0	1917.930 1	959.468 7	1916.946 1	958.976 7	2
3	283.1513	142.079 3	266.1248	133.566 0	265.1407	133.074 0	S	1877.935 2	939.471 2	1860.908 6	930.958 0	1859.924 6	930.465 9	1
4	370.1833	185.595 3	353.1568	177.082 0	352.1728	176.590 0	S	1808.913 7	904.960 5	1791.887 2	896.447 2	1790.903 2	895.955 2	1
5	457.2154	229.111 3	440.1888	220.598 0	439.2048	220.106 0	S	1721.881 7	861.444 5	1704.855 1	852.931 2	1703.871 1	852.439 2	1
6	544.2474	272.627 3	527.2208	264.114 1	526.2368	263.622 1	S	1634.849 7	817.928 5	1617.823 1	809.415 2	1616.839 1	808.923 2	1
7	601.2689	301.138 1	584.2423	292.624 8	583.2583	292.132 8	G	1547.817 6	774.412 5	1530.791 1	765.899 2	1529.807 1	765.407 2	1
8	716.2958	358.651 5	699.2693	350.138 3	698.2852	349.646 3	D	1490.796 2	745.901 7	1473.769 6	737.388 4	1472.785 6	736.896 4	1
9	813.3486	407.177 9	796.3220	398.664 6	795.3380	398.172 6	P	1375.769 2	688.388 3	1358.742 7	679.875 0	1357.758 7	679.383 0	1

10	1	910.4013	455.7043	893.3748	447.1910	892.3908	446.6990	P	1278.7165	639.8619	1261.6899	631.3486	1260.7059	630.8566	12
11	1	1023.4854	512.2463	1006.4588	503.7331	1005.4748	503.2411	L	1181.6637	591.3355	1164.6371	582.8222	1163.6531	582.3302	11
12	1	1080.5069	540.7571	1063.4803	532.2438	1062.4963	531.7518	G	1068.5796	534.7935	1051.5531	526.2802	1050.5691	525.7882	10
13	1	1195.5338	598.2705	1178.5073	589.7573	1177.5232	589.2653	D	1011.5582	506.2827	994.5316	497.7694	993.5476	497.2774	9
14	1	1323.5924	662.2998	1306.5658	653.7866	1305.5818	653.2945	Q	896.5312	448.7693	879.5047	440.2560	878.5207	439.7640	8
15	1	1451.6873	726.3473	1434.6608	717.8340	1433.6768	717.3420	K	768.4726	384.7400	751.4461	376.2267	750.4621	375.7347	7
16	1	1548.7401	774.8737	1531.7136	766.3604	1530.7295	765.8684	P	640.3777	320.6925	623.3511	312.1792	622.3671	311.6872	6
17	1	1645.7929	823.4001	1628.7663	814.8868	1627.7823	814.3948	P	543.3249	272.1661	526.2984	263.6528	525.3144	263.1608	5
18	1	1716.8300	858.9186	1699.8034	850.4054	1698.8194	849.9133	A	446.2722	223.6397	429.2456	215.1264	428.2616	214.6344	4
19	1	1803.8620	902.4346	1786.8355	893.9214	1785.8515	893.4294	S	375.2350	188.1212	358.2085	179.6079	357.2245	179.1159	3
20	2	1916.9461	958.9767	1899.9195	950.4634	1898.9355	949.9714	L	288.2030	144.6051	271.1765	136.0919			2
21	2							R	175.1190	88.0631	158.0924	79.5498			1





Monoisotopic mass of neutral peptide Mr(calc): 2267.9937

Variable modifications:

S3 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

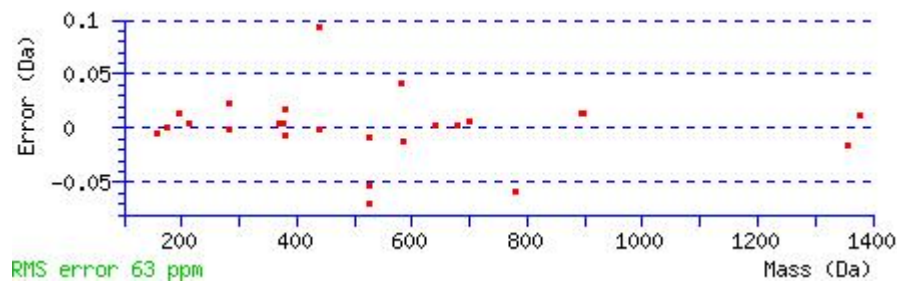
S5 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 43 Expect: 0.16

Matches : 25/364 fragment ions using 40 most intense peaks ([help](#))

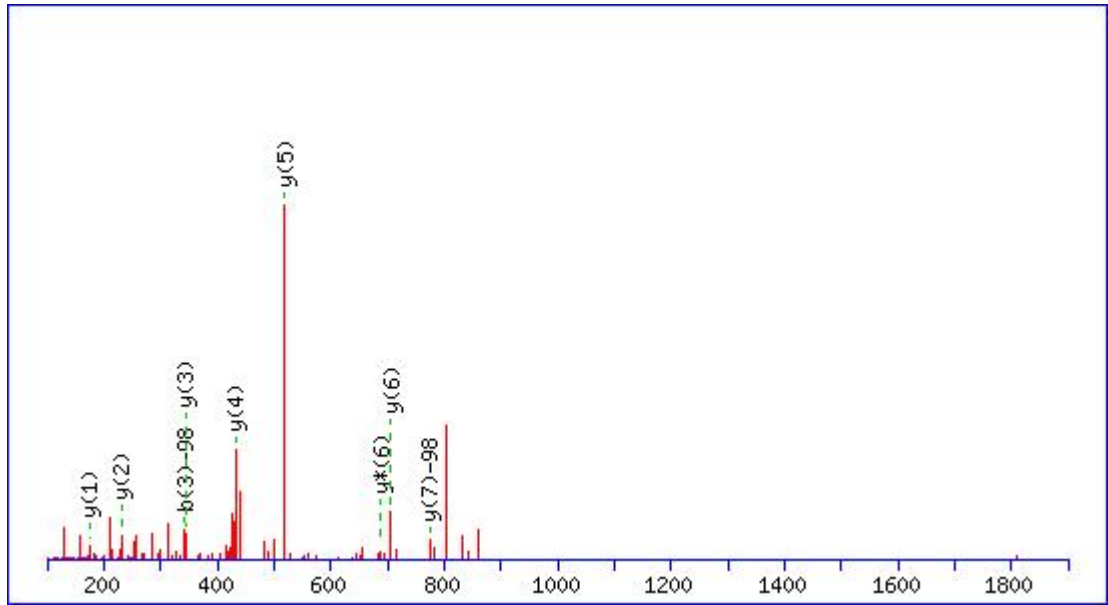
#	b	b ⁺⁺	b [*]	b ^{***}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	157.1084	79.0578	140.0818	70.5446			R							2
2	214.1299	107.5686	197.1033	99.0553			G	1916.9461	958.9767	1899.9195	950.4634	1898.9355	949.9714	20
3	283.1513	142.0793	266.1248	133.5660	265.1407	133.0740	S	1859.9246	930.4659	1842.8981	921.9527	1841.9140	921.4607	19
4	370.1833	185.5953	353.1568	177.0820	352.1728	176.5900	S	1790.9032	895.9552	1773.8766	887.4419	1772.8926	886.9499	18
5	439.2048	220.1060	422.1783	211.5928	421.1942	211.1008	S	1703.8711	852.4392	1686.8446	843.9259	1685.8606	843.4339	17
6	526.2368	263.6221	509.2103	255.1088	508.2263	254.6168	S	1634.8497	817.9285	1617.8231	809.4152	1616.8391	808.9232	16
7	583.2583	292.1328	566.2317	283.6195	565.2477	283.1275	G	1547.8176	774.4125	1530.7911	765.8992	1529.8071	765.4072	15
8	698.2852	349.6463	681.2587	341.1330	680.2747	340.6410	D	1490.7962	745.9017	1473.7696	737.3884	1472.7856	736.8964	14
9	795.3380	398.1726	778.3115	389.6594	777.3274	389.1674	P	1375.7692	688.3883	1358.7427	679.8750	1357.7587	679.3830	13

10	892.3908	446.6990	875.3642	438.1857	874.3802	437.6937	P	1278.7165	639.8619	1261.6899	631.3486	1260.7059	630.8566	12
11	1005.4748	503.2411	988.4483	494.7278	987.4643	494.2358	L	1181.6637	591.3355	1164.6371	582.8222	1163.6531	582.3302	11
12	1062.4963	531.7518	1045.4697	523.2385	1044.4857	522.7465	G	1068.5796	534.7935	1051.5531	526.2802	1050.5691	525.7882	10
13	1177.5232	589.2653	1160.4967	580.7520	1159.5127	580.2600	D	1011.5582	506.2827	994.5316	497.7694	993.5476	497.2774	9
14	1305.5818	653.2945	1288.5553	644.7813	1287.5713	644.2893	Q	896.5312	448.7693	879.5047	440.2560	878.5207	439.7640	8
15	1433.6768	717.3420	1416.6502	708.8288	1415.6662	708.3367	K	768.4726	384.7400	751.4461	376.2267	750.4621	375.7347	7
16	1530.7295	765.8684	1513.7030	757.3551	1512.7190	756.8631	P	640.3777	320.6925	623.3511	312.1792	622.3671	311.6872	6
17	1627.7823	814.3948	1610.7558	805.8815	1609.7717	805.3895	P	543.3249	272.1661	526.2984	263.6528	525.3144	263.1608	5
18	1698.8194	849.9133	1681.7929	841.4001	1680.8089	840.9081	A	446.2722	223.6397	429.2456	215.1264	428.2616	214.6344	4
19	1785.8514	893.4294	1768.8249	884.9161	1767.8409	884.4241	S	375.2350	188.1212	358.2085	179.6079	357.2245	179.1159	3
20	1898.9355	949.9714	1881.9090	941.4581	1880.9249	940.9661	L	288.2030	144.6051	271.1765	136.0919			2
21							R	175.1190	88.0631	158.0924	79.5498			1



22_MS/MS Fragmentation of **SSWSSLGR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 958.3909

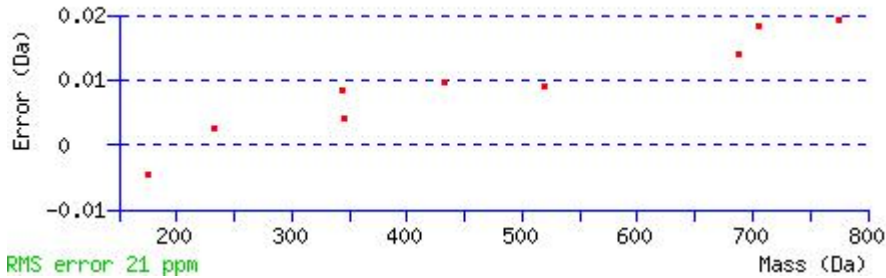
Variable modifications:

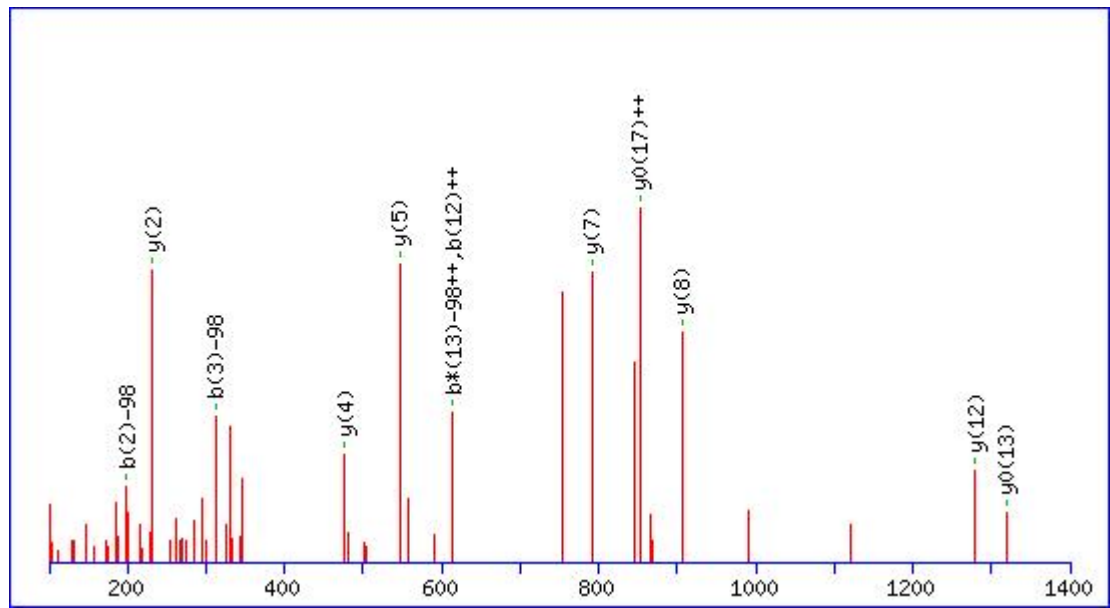
S2 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 43 Expect: 0.074

Matches : 9/94 fragment ions using 24 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	88.0393	44.5233	70.0287	35.5180	S							8
2	157.0608	79.0340	139.0502	70.0287	S	774.3893	387.6983	757.3628	379.1850	756.3787	378.6930	7
3	343.1401	172.0737	325.1295	163.0684	W	705.3678	353.1876	688.3413	344.6743	687.3573	344.1823	6
4	430.1721	215.5897	412.1615	206.5844	S	519.2885	260.1479	502.2620	251.6346	501.2780	251.1426	5
5	517.2041	259.1057	499.1936	250.1004	S	432.2565	216.6319	415.2300	208.1186	414.2459	207.6266	4
6	630.2882	315.6477	612.2776	306.6425	L	345.2245	173.1159	328.1979	164.6026			3
7	687.3097	344.1585	669.2991	335.1532	G	232.1404	116.5738	215.1139	108.0606			2
8					R	175.1190	88.0631	158.0924	79.5498			1





Monoisotopic mass of neutral peptide Mr(calc): 2130.8590

Variable modifications:

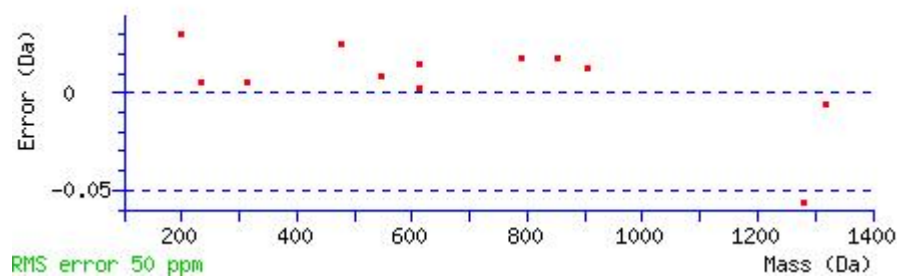
S2 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 49 Expect: 0.027

Matches : 12/308 fragment ions using 12 most intense peaks ([help](#))

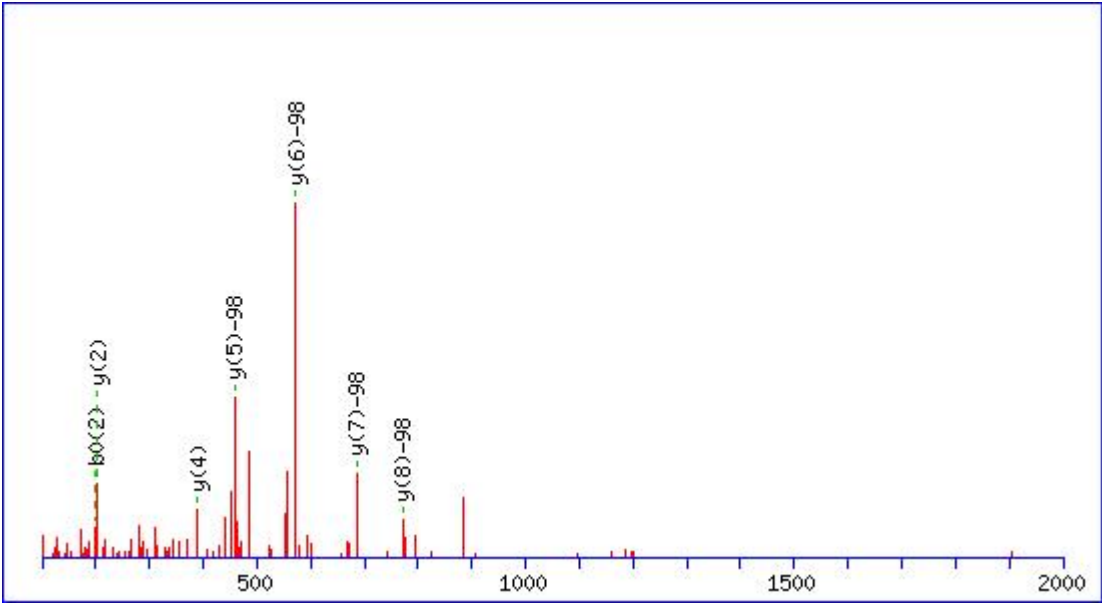
#	b	b ⁺⁺	b [*]	b ^{*++}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	130.0499	65.5286			112.0393	56.5233	E							20
2	199.0713	100.0393			181.0608	91.0340	S	1904.8468	952.9270	1887.8203	944.4138	1886.8363	943.9218	19
3	312.1554	156.5813			294.1448	147.5761	L	1835.8254	918.4163	1818.7988	909.9030	1817.8148	909.4110	18
4	425.2395	213.1234			407.2289	204.1181	L	1722.7413	861.8743	1705.7147	853.3610	1704.7307	852.8690	17
5	512.2715	256.6394			494.2609	247.6341	S	1609.6572	805.3323	1592.6307	796.8190	1591.6467	796.3270	16
6	569.2930	285.1501			551.2824	276.1448	G	1522.6252	761.8162	1505.5987	753.3030	1504.6146	752.8110	15
7	698.3355	349.6714			680.3250	340.6661	E	1465.6037	733.3055	1448.5772	724.7922	1447.5932	724.3002	14
8	755.3570	378.1821			737.3464	369.1769	G	1336.5611	668.7842	1319.5346	660.2709	1318.5506	659.7789	13
9	883.4520	442.2296	866.4254	433.7163	865.4414	433.2243	K	1279.5397	640.2735	1262.5131	631.7602	1261.5291	631.2682	12

10	940.4734	470.7404	923.4469	462.2271	922.4629	461.7351	G	1151.4447	576.2260	1134.4182	567.7127	1133.4342	567.2207	11
11	1027.5055	514.2564	1010.4789	505.7431	1009.4949	505.2511	S	1094.4233	547.7153	1077.3967	539.2020	1076.4127	538.7100	10
12	1128.5531	564.7802	1111.5266	556.2669	1110.5426	555.7749	T	1007.3912	504.1993	990.3647	495.6860	989.3807	495.1940	9
13	1243.5801	622.2937	1226.5535	613.7804	1225.5695	613.2884	D	906.3435	453.6754	889.3170	445.1621	888.3330	444.6701	8
14	1358.6070	679.8072	1341.5805	671.2939	1340.5965	670.8019	D	791.3166	396.1619	774.2901	387.6487	773.3060	387.1567	7
15	1487.6496	744.3284	1470.6231	735.8152	1469.6391	735.3232	E	676.2897	338.6485	659.2631	330.1352	658.2791	329.6432	6
16	1558.6867	779.8470	1541.6602	771.3337	1540.6762	770.8417	A	547.2471	274.1272	530.2205	265.6139	529.2365	265.1219	5
17	1687.7293	844.3683	1670.7028	835.8550	1669.7188	835.3630	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
18	1802.7563	901.8818	1785.7297	893.3685	1784.7457	892.8765	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
19	1859.7777	930.3925	1842.7512	921.8792	1841.7672	921.3872	G	232.1404	116.5738	215.1139	108.0606			2
20							R	175.1190	88.0631	158.0924	79.5498			1



24_MS/MS Fragmentation of **ESLLSGEGK**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide $M_r(\text{calc})$: 998.4321

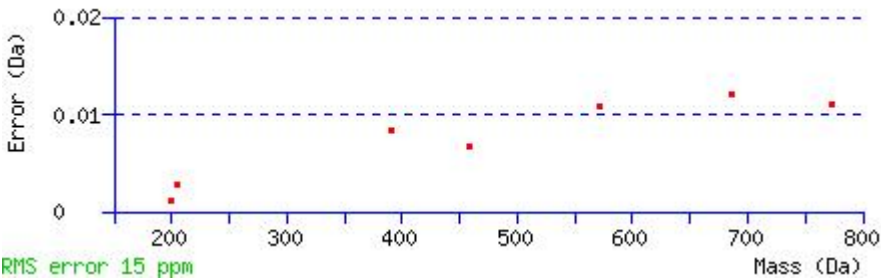
Variable modifications:

S5 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 55 Expect: 0.0051

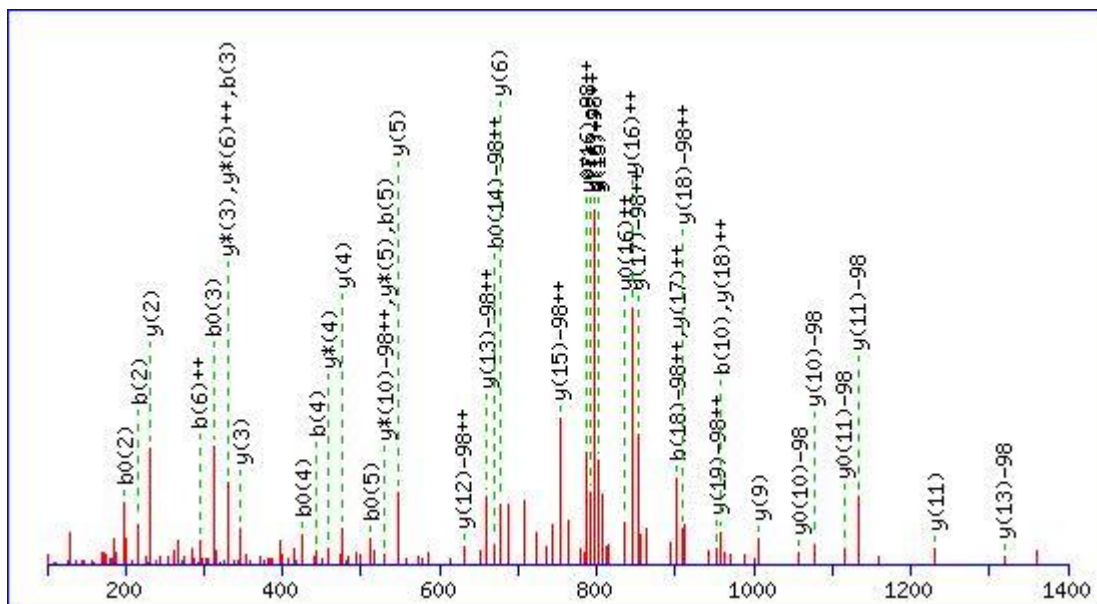
Matches : 7/116 fragment ions using 9 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	130.0499	65.5286	112.0393	56.5233	E							9
2	217.0819	109.0446	199.0713	100.0393	S	772.4199	386.7136	755.3934	378.2003	754.4094	377.7083	8
3	330.1660	165.5866	312.1554	156.5813	L	685.3879	343.1976	668.3614	334.6843	667.3774	334.1923	7
4	443.2500	222.1287	425.2395	213.1234	L	572.3039	286.6556	555.2773	278.1423	554.2933	277.6503	6
5	512.2715	256.6394	494.2609	247.6341	S	459.2198	230.1135	442.1932	221.6003	441.2092	221.1082	5
6	569.2930	285.1501	551.2824	276.1448	G	390.1983	195.6028	373.1718	187.0895	372.1878	186.5975	4
7	698.3355	349.6714	680.3250	340.6661	E	333.1769	167.0921	316.1503	158.5788	315.1663	158.0868	3
8	755.3570	378.1821	737.3464	369.1769	G	204.1343	102.5708	187.1077	94.0575			2
9					K	147.1128	74.0600	130.0863	65.5468			1



25_MS/MS Fragmentation of **ESLLSGEGKGSTDDEAEDGR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 2130.8590

Variable modifications:

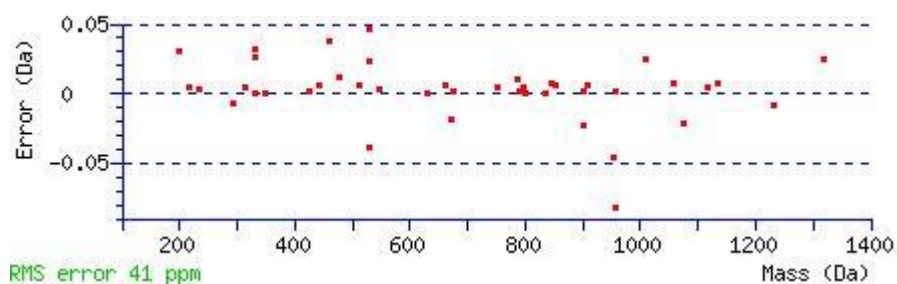
S11 : Phospho (ST), with neutral losses 97.9769 (shown in table), 0.0000

Ions Score: 75 Expect: 6.8e-005

Matches : 43/322 fragment ions using 54 most intense peaks ([help](#))

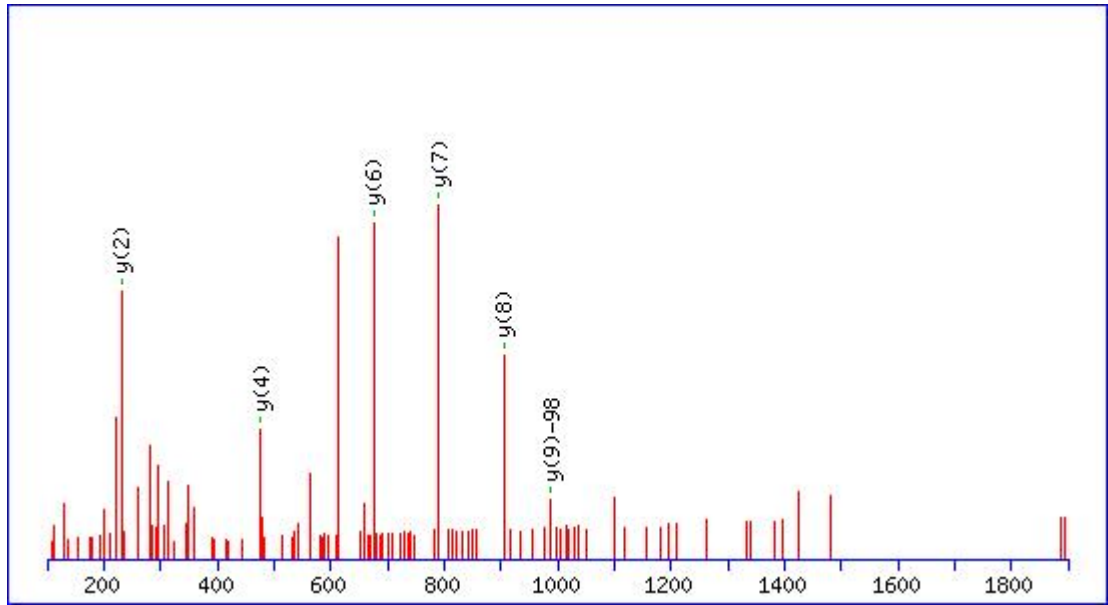
#	b	b⁺⁺	b*	b^{***}	b⁰	b⁰⁺⁺	Seq .	y	y⁺⁺	y*	y^{***}	y⁰	y⁰⁺⁺	#
1	130.0499	65.5286			112.0393	56.5233	E							20
2	217.0819	109.0446			199.0713	100.0393	S	1904.8468	952.9270	1887.8203	944.4138	1886.8363	943.9218	19
3	330.1660	165.5866			312.1554	156.5813	L	1817.8148	909.4110	1800.7882	900.8978	1799.8042	900.4058	18
4	443.2500	222.1287			425.2395	213.1234	L	1704.7307	852.8690	1687.7042	844.3557	1686.7202	843.8637	17
5	530.2821	265.6447			512.2715	256.6394	S	1591.6467	796.3270	1574.6201	787.8137	1573.6361	787.3217	16
6	587.3035	294.1554			569.2930	285.1501	G	1504.6146	752.8110	1487.5881	744.2977	1486.6041	743.8057	15
7	716.3461	358.6767			698.3355	349.6714	E	1447.5932	724.3002	1430.5666	715.7869	1429.5826	715.2949	14
8	773.3676	387.1874			755.3570	378.1821	G	1318.5506	659.7789	1301.5240	651.2657	1300.5400	650.7736	13
9	901.4625	451.2349	884.4360	442.7216	883.4520	442.2296	K	1261.5291	631.2682	1244.5026	622.7549	1243.5185	622.2629	12

10	958.4840	479.745 6	941.4575	471.232 4	940.4734	470.740 4	G	1133.434 2	567.220 7	1116.407 6	558.707 4	1115.423 6	558.215 4	11
11	1027.505 5	514.256 4	1010.478 9	505.743 1	1009.494 9	505.251 1	S	1076.412 7	538.710 0	1059.386 1	530.196 7	1058.402 1	529.704 7	10
12	1128.553 1	564.780 2	1111.526 6	556.266 9	1110.542 6	555.774 9	T	1007.391 2	504.199 3	990.3647	495.686 0	989.3807	495.194 0	9
13	1243.580 1	622.293 7	1226.553 5	613.780 4	1225.569 5	613.288 4	D	906.3435	453.675 4	889.3170	445.162 1	888.3330	444.670 1	8
14	1358.607 0	679.807 2	1341.580 5	671.293 9	1340.596 5	670.801 9	D	791.3166	396.161 9	774.2901	387.648 7	773.3060	387.156 7	7
15	1487.649 6	744.328 4	1470.623 1	735.815 2	1469.639 1	735.323 2	E	676.2897	338.648 5	659.2631	330.135 2	658.2791	329.643 2	6
16	1558.686 7	779.847 0	1541.660 2	771.333 7	1540.676 2	770.841 7	A	547.2471	274.127 2	530.2205	265.613 9	529.2365	265.121 9	5
17	1687.729 3	844.368 3	1670.702 8	835.855 0	1669.718 8	835.363 0	E	476.2100	238.608 6	459.1834	230.095 3	458.1994	229.603 3	4
18	1802.756 3	901.881 8	1785.729 7	893.368 5	1784.745 7	892.876 5	D	347.1674	174.087 3	330.1408	165.574 0	329.1568	165.082 0	3
19	1859.777 7	930.392 5	1842.751 2	921.879 2	1841.767 2	921.387 2	G	232.1404	116.573 8	215.1139	108.060 6			2
20							R	175.1190	88.0631	158.0924	79.5498			1



26_MS/MS Fragmentation of **GSTDDEAEDGR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide $M_r(\text{calc})$: 1230.4038

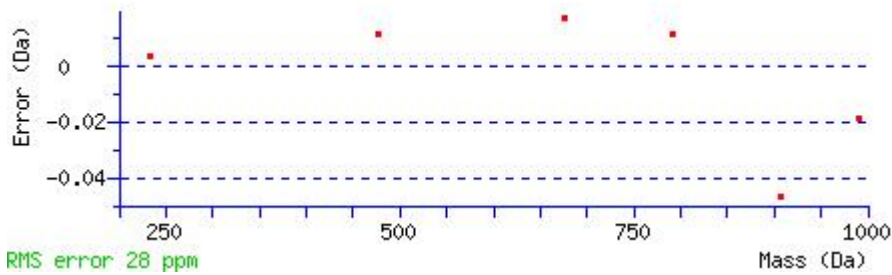
Variable modifications:

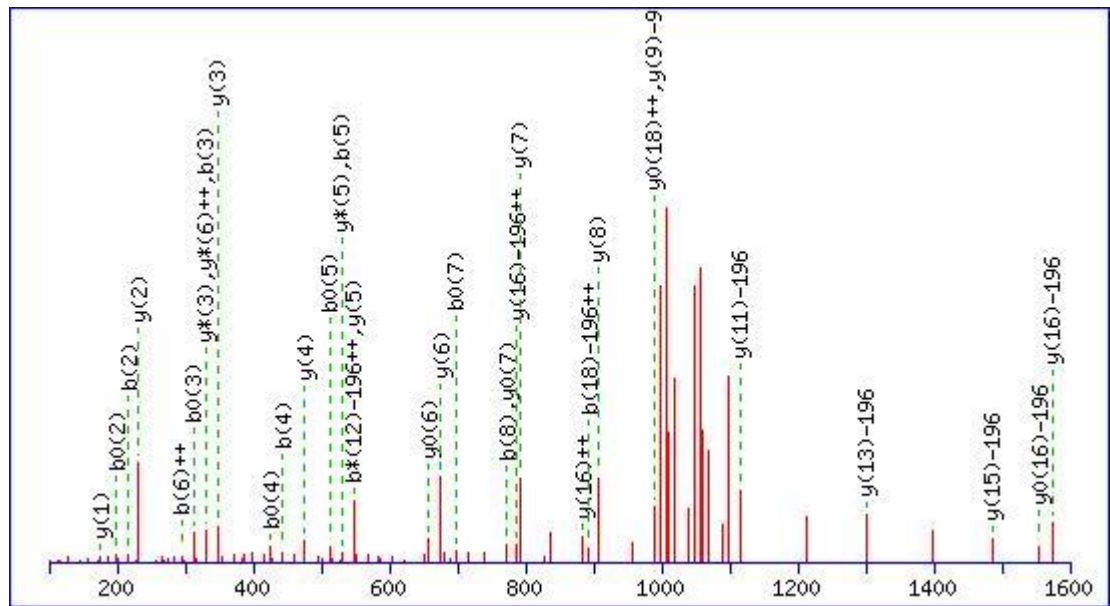
T3 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 36 Expect: 0.17

Matches : 6/138 fragment ions using 12 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	58.0287	29.5180			G							11
2	145.0608	73.0340	127.0502	64.0287	S	1076.4127	538.7100	1059.3861	530.1967	1058.4021	529.7047	10
3	228.0979	114.5526	210.0873	105.5473	T	989.3807	495.1940	972.3541	486.6807	971.3701	486.1887	9
4	343.1248	172.0661	325.1143	163.0608	D	906.3435	453.6754	889.3170	445.1621	888.3330	444.6701	8
5	458.1518	229.5795	440.1412	220.5742	D	791.3166	396.1619	774.2901	387.6487	773.3060	387.1567	7
6	587.1944	294.1008	569.1838	285.0955	E	676.2897	338.6485	659.2631	330.1352	658.2791	329.6432	6
7	658.2315	329.6194	640.2209	320.6141	A	547.2471	274.1272	530.2205	265.6139	529.2365	265.1219	5
8	787.2741	394.1407	769.2635	385.1354	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
9	902.3010	451.6541	884.2904	442.6489	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
10	959.3225	480.1649	941.3119	471.1596	G	232.1404	116.5738	215.1139	108.0606			2
11					R	175.1190	88.0631	158.0924	79.5498			1





Monoisotopic mass of neutral peptide Mr(calc): 2210.8253

Variable modifications:

S11 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

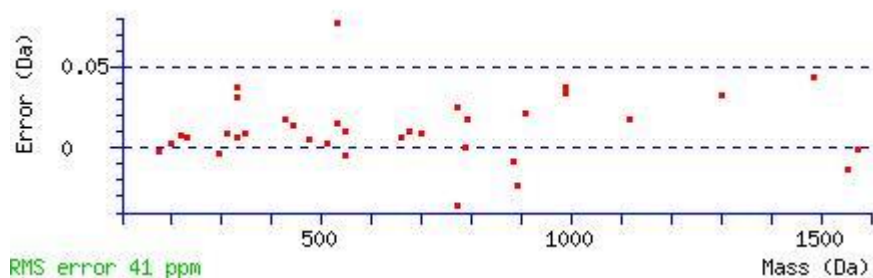
T12 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 113 Expect: 9e-009

Matches : 35/328 fragment ions using 37 most intense peaks ([help](#))

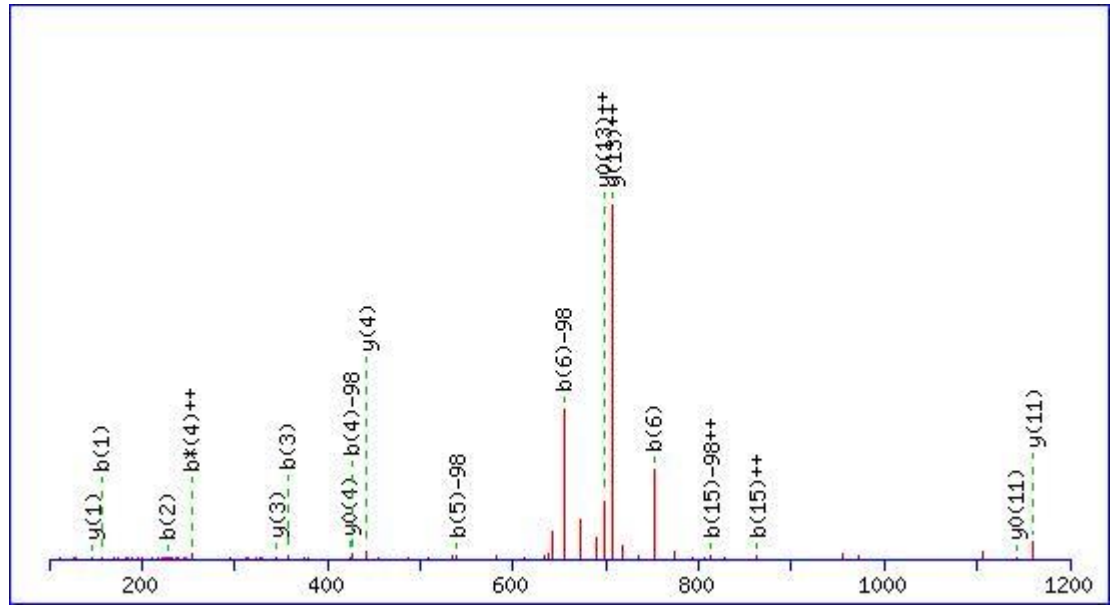
#	b	b ⁺⁺	b [*]	b ^{***}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	130.0499	65.5286			112.0393	56.5233	E							20
2	217.0819	109.0446			199.0713	100.0393	S	1886.8363	943.9218	1869.8097	935.4085	1868.8257	934.9165	19
3	330.1660	165.5866			312.1554	156.5813	L	1799.8042	900.4058	1782.7777	891.8925	1781.7937	891.4005	18
4	443.2500	222.1287			425.2395	213.1234	L	1686.7202	843.8637	1669.6936	835.3504	1668.7096	834.8584	17
5	530.2821	265.6447			512.2715	256.6394	S	1573.6361	787.3217	1556.6095	778.8084	1555.6255	778.3164	16
6	587.3035	294.1554			569.2930	285.1501	G	1486.6041	743.8057	1469.5775	735.2924	1468.5935	734.8004	15
7	716.3461	358.6767			698.3355	349.6714	E	1429.5826	715.2949	1412.5561	706.7817	1411.5720	706.2897	14
8	773.3676	387.1874			755.3570	378.1821	G	1300.5400	650.7736	1283.5135	642.2604	1282.5294	641.7684	13
9	901.4625	451.2349	884.4360	442.7216	883.4520	442.2296	K	1243.5185	622.2629	1226.4920	613.7496	1225.5080	613.2576	12

10	958.4840	479.7456	941.4575	471.2324	940.4734	470.7404	G	1115.4236	558.2154	1098.3970	549.7022	1097.4130	549.2101	11
11	1027.5055	514.2564	1010.4789	505.7431	1009.4949	505.2511	S	1058.4021	529.7047	1041.3756	521.1914	1040.3916	520.6994	10
12	1110.5426	555.7749	1093.5160	547.2617	1092.5320	546.7696	T	989.3807	495.1940	972.3541	486.6807	971.3701	486.1887	9
13	1225.5695	613.2884	1208.5430	604.7751	1207.5590	604.2831	D	906.3435	453.6754	889.3170	445.1621	888.3330	444.6701	8
14	1340.5965	670.8019	1323.5699	662.2886	1322.5859	661.7966	D	791.3166	396.1619	774.2901	387.6487	773.3060	387.1567	7
15	1469.6391	735.3232	1452.6125	726.8099	1451.6285	726.3179	E	676.2897	338.6485	659.2631	330.1352	658.2791	329.6432	6
16	1540.6762	770.8417	1523.6496	762.3284	1522.6656	761.8364	A	547.2471	274.1272	530.2205	265.6139	529.2365	265.1219	5
17	1669.7188	835.3630	1652.6922	826.8497	1651.7082	826.3577	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
18	1784.7457	892.8765	1767.7192	884.3632	1766.7351	883.8712	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
19	1841.7672	921.3872	1824.7406	912.8739	1823.7566	912.3819	G	232.1404	116.5738	215.1139	108.0606			2
20							R	175.1190	88.0631	158.0924	79.5498			1



28_MS/MS Fragmentation of **RAESLDPRPLRPAALPPTK**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 2164.1517

Variable modifications:

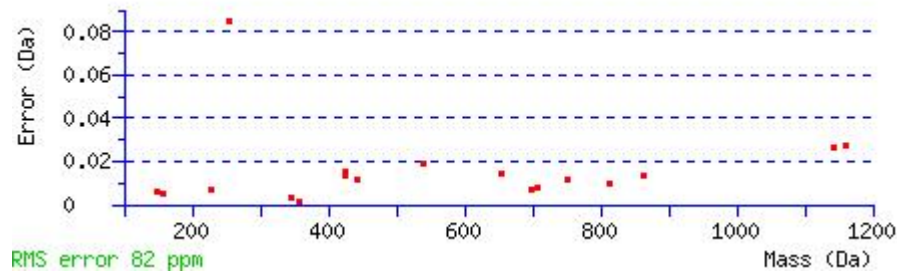
S4 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 35 Expect: 0.53

Matches : 18/318 fragment ions using 29 most intense peaks (help)

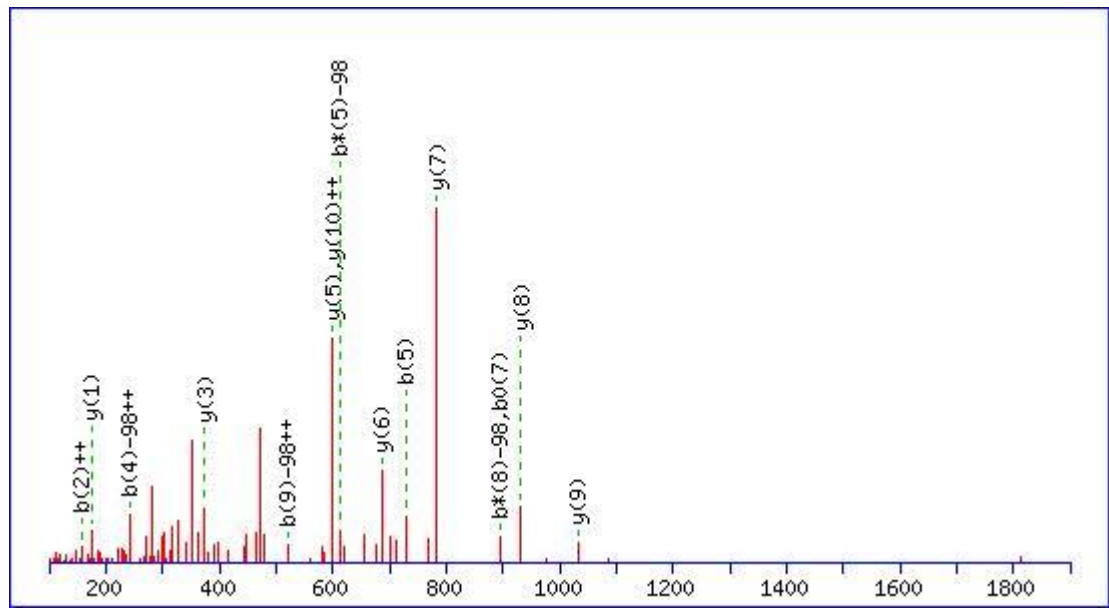
#	b	b ⁺⁺	b [*]	b ^{*++}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	157.1084	79.0578	140.0818	70.5446			R							1
2	228.1455	114.576 4	211.1190	106.063 1			A	1911.081 1	956.044 2	1894.054 5	947.530 9	1893.070 5	947.038 9	1
3	357.1881	179.097 7	340.1615	170.584 4	339.1775	170.092 4	E	1840.043 9	920.525 6	1823.017 4	912.012 3	1822.033 4	911.520 3	1
4	426.2096	213.608 4	409.1830	205.095 1	408.1990	204.603 1	S	1711.001 4	856.004 3	1693.974 8	847.491 0	1692.990 8	846.999 0	1
5	539.2936	270.150 4	522.2671	261.637 2	521.2831	261.145 2	L	1641.979 9	821.493 6	1624.953 3	812.980 3	1623.969 3	812.488 3	1
6	654.3206	327.663 9	637.2940	319.150 6	636.3100	318.658 6	D	1528.895 8	764.951 6	1511.869 3	756.438 3	1510.885 3	755.946 3	1
7	751.3733	376.190 3	734.3468	367.677 0	733.3628	367.185 0	P	1413.868 9	707.438 1	1396.842 3	698.924 8	1395.858 3	698.432 8	1
8	907.4744	454.240 9	890.4479	445.727 6	889.4639	445.235 6	R	1316.816 1	658.911 7	1299.789 6	650.398 4	1298.805 6	649.906 4	1
9	1004.527 2	502.767 2	987.5007	494.254 0	986.5166	493.762 0	P	1160.715 0	580.861 1	1143.688 5	572.347 9	1142.704 4	571.855 9	1

10	1117.6113	559.3093	1100.5847	550.7960	1099.6007	550.3040	L	1063.6622	532.3348	1046.6357	523.8215	1045.6517	523.3295	10
11	1273.7124	637.3598	1256.6858	628.8466	1255.7018	628.3545	R	950.5782	475.7927	933.5516	467.2795	932.5676	466.7874	9
12	1370.7651	685.8862	1353.7386	677.3729	1352.7546	676.8809	P	794.4771	397.7422	777.4505	389.2289	776.4665	388.7369	8
13	1441.8023	721.4048	1424.7757	712.8915	1423.7917	712.3995	A	697.4243	349.2158	680.3978	340.7025	679.4137	340.2105	7
14	1512.8394	756.9233	1495.8128	748.4100	1494.8288	747.9180	A	626.3872	313.6972	609.3606	305.1840	608.3766	304.6920	6
15	1625.9234	813.4654	1608.8969	804.9521	1607.9129	804.4601	L	555.3501	278.1787	538.3235	269.6654	537.3395	269.1734	5
16	1722.9762	861.9917	1705.9496	853.4785	1704.9656	852.9865	P	442.2660	221.6366	425.2395	213.1234	424.2554	212.6314	4
17	1820.0290	910.5181	1803.0024	902.0048	1802.0184	901.5128	P	345.2132	173.1103	328.1867	164.5970	327.2027	164.1050	3
18	1921.0766	961.0420	1904.0501	952.5287	1903.0661	952.0367	T	248.1605	124.5839	231.1339	116.0706	230.1499	115.5786	2
19							K	147.1128	74.0600	130.0863	65.5468			1



29_MS/MS Fragmentation of **RRSTFPSPEAQR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1510.7042

Variable modifications:

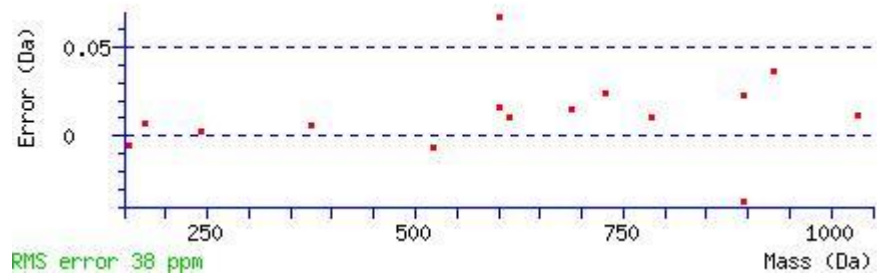
S3 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

Ions Score: 47 Expect: 0.046

Matches : 16/188 fragment ions using 19 most intense peaks ([help](#))

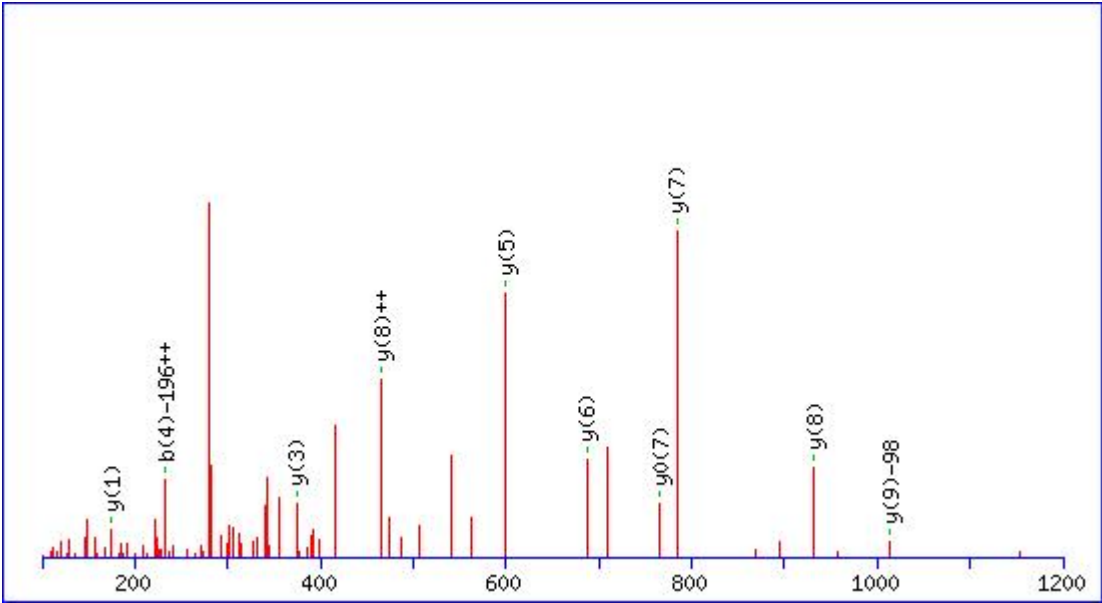
#	b	b ⁺⁺	b [*]	b ^{*++}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	157.1084	79.0578	140.0818	70.5446			R							1
2	313.2095	157.1084	296.1829	148.5951			R	1355.6104	678.3088	1338.5838	669.7955	1337.5998	669.3035	1
3	480.2079	240.6076	463.1813	232.0943	462.1973	231.6023	S	1199.5092	600.2583	1182.4827	591.7450	1181.4987	591.2530	1
4	581.2555	291.1314	564.2290	282.6181	563.2450	282.1261	T	1032.5109	516.7591	1015.4843	508.2458	1014.5003	507.7538	9
5	728.3239	364.6656	711.2974	356.1523	710.3134	355.6603	F	931.4632	466.2352	914.4367	457.7220	913.4526	457.2300	8
6	825.3767	413.1920	808.3502	404.6787	807.3661	404.1867	P	784.3948	392.7010	767.3682	384.1878	766.3842	383.6958	7
7	912.4087	456.7080	895.3822	448.1947	894.3982	447.7027	S	687.3420	344.1747	670.3155	335.6614	669.3315	335.1694	6
8	1009.4615	505.2344	992.4350	496.7211	991.4509	496.2291	P	600.3100	300.6586	583.2835	292.1454	582.2994	291.6534	5
9	1138.5041	569.7557	1121.4776	561.2424	1120.4935	560.7504	E	503.2572	252.1323	486.2307	243.6190	485.2467	243.1270	4

10	1209.5412	605.2742	1192.5147	596.7610	1191.5306	596.2690	A	374.2146	187.6110	357.1881	179.0977			3
11	1337.5998	669.3035	1320.5732	660.7903	1319.5892	660.2983	Q	303.1775	152.0924	286.1510	143.5791			2
12							R	175.1190	88.0631	158.0924	79.5498			1



30_MS/MS Fragmentation of **RRSTFPSPEAQR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1590.6705

Variable modifications:

S3 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

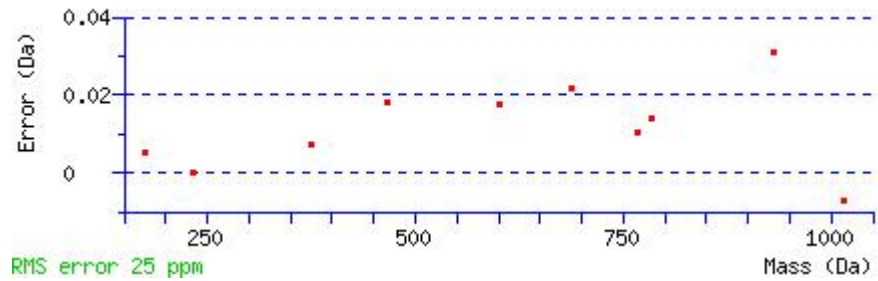
T4 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 32 Expect: 1.4

Matches : 10/194 fragment ions using 25 most intense peaks ([help](#))

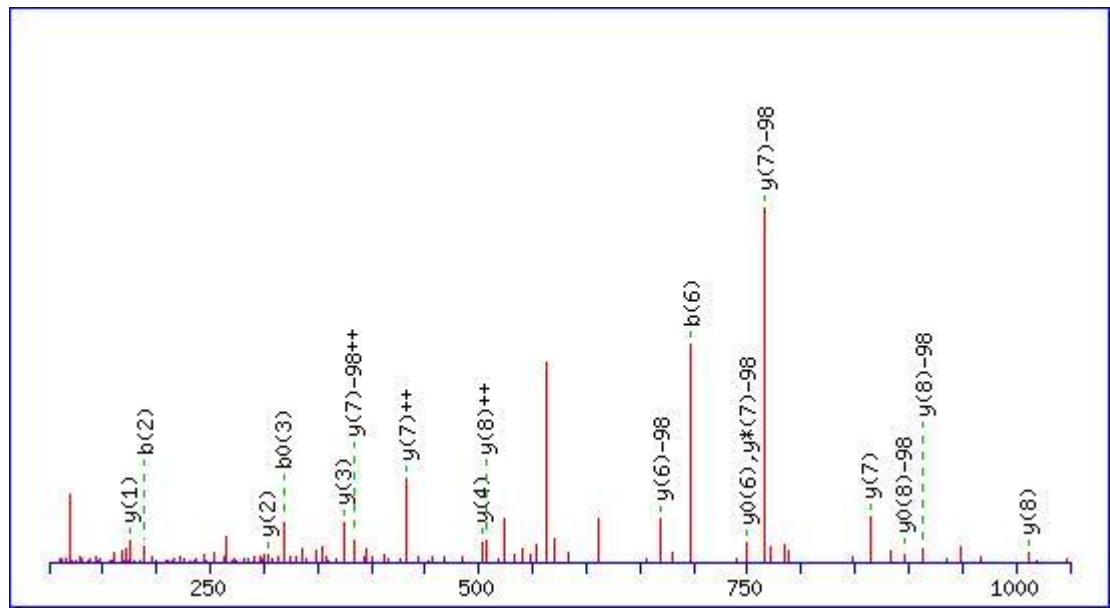
#	b	b ⁺⁺	b [*]	b ^{***}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	157.1084	79.0578	140.0818	70.5446			R							1
2	313.2095	157.1084	296.1829	148.5951			R	1239.6229	620.3151	1222.5963	611.8018	1221.6123	611.3098	1
3	382.2310	191.6191	365.2044	183.1058	364.2204	182.6138	S	1083.5218	542.2645	1066.4952	533.7513	1065.5112	533.2592	1
4	465.2681	233.1377	448.2415	224.6244	447.2575	224.1324	T	1014.5003	507.7538	997.4738	499.2405	996.4898	498.7485	9
5	612.3365	306.6719	595.3099	298.1586	594.3259	297.6666	F	931.4632	466.2352	914.4367	457.7220	913.4526	457.2300	8
6	709.3893	355.1983	692.3627	346.6850	691.3787	346.1930	P	784.3948	392.7010	767.3682	384.1878	766.3842	383.6958	7
7	796.4213	398.7143	779.3947	390.2010	778.4107	389.7090	S	687.3420	344.1747	670.3155	335.6614	669.3315	335.1694	6
8	893.4740	447.2407	876.4475	438.7274	875.4635	438.2354	P	600.3100	300.6586	583.2835	292.1454	582.2994	291.6534	5
9	1022.5166	511.7620	1005.4901	503.2487	1004.5061	502.7567	E	503.2572	252.1323	486.2307	243.6190	485.2467	243.1270	4

10	1093.5538	547.2805	1076.5272	538.7672	1075.5432	538.2752	A	374.2146	187.6110	357.1881	179.0977			3
11	1221.6123	611.3098	1204.5858	602.7965	1203.6018	602.3045	Q	303.1775	152.0924	286.1510	143.5791			2
12							R	175.1190	88.0631	158.0924	79.5498			1



31_MS/MS Fragmentation of **STFPSPEAQR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1198.5020

Variable modifications:

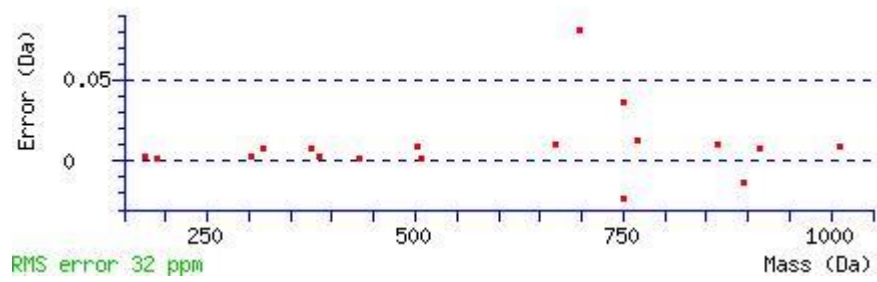
S5 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

Ions Score: 34 Expect: 0.76

Matches : 18/132 fragment ions using 30 most intense peaks ([help](#))

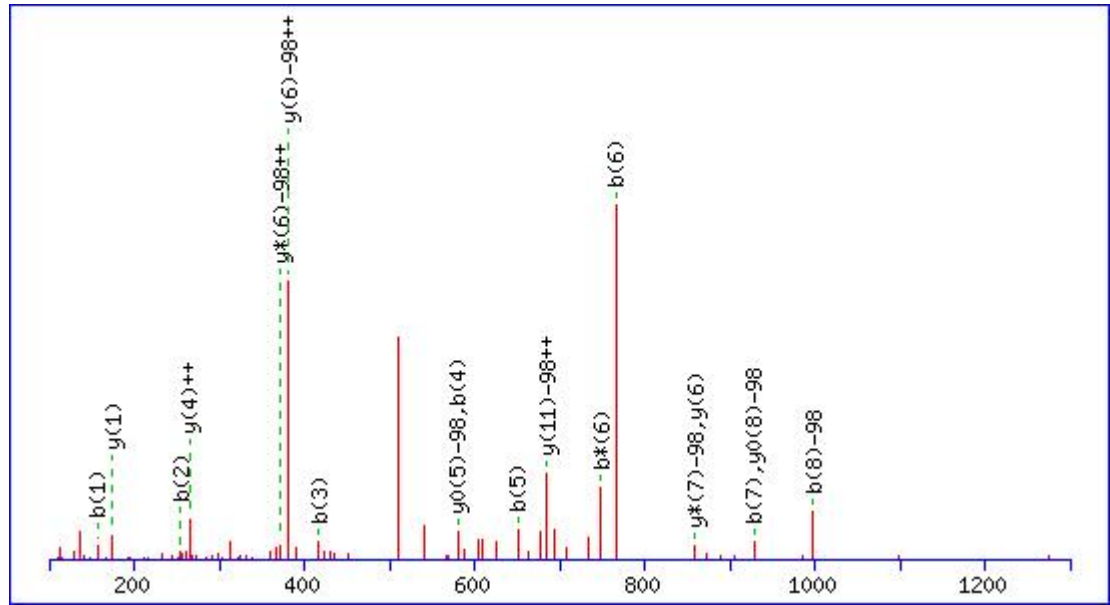
#	b	b ⁺⁺	b [*]	b ^{***}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	88.0393	44.5233			70.0287	35.5180	S							10
2	189.0870	95.0471			171.0764	86.0418	T	1112.477 2	556.742 2	1095.450 7	548.229 0	1094.466 7	547.737 0	9
3	336.1554	168.581 3			318.1448	159.576 1	F	1011.429 5	506.218 4	994.4030	497.705 1	993.4190	497.213 1	8
4	433.2082	217.107 7			415.1976	208.102 4	P	864.3611	432.684 2	847.3346	424.170 9	846.3506	423.678 9	7
5	600.2065	300.606 9			582.1960	291.601 6	S	767.3084	384.157 8	750.2818	375.644 5	749.2978	375.152 5	6
6	697.2593	349.133 3			679.2487	340.128 0	P	600.3100	300.658 6	583.2835	292.145 4	582.2994	291.653 4	5
7	826.3019	413.654 6			808.2913	404.649 3	E	503.2572	252.132 3	486.2307	243.619 0	485.2467	243.127 0	4
8	897.3390	449.173 1			879.3284	440.167 9	A	374.2146	187.611 0	357.1881	179.097 7			3
9	1025.397 6	513.202 4	1008.371 0	504.689 1	1007.387 0	504.197 1	Q	303.1775	152.092 4	286.1510	143.579 1			2

1							R	175.1190	88.0631	158.0924	79.5498			1
0														



32_MS/MS Fragmentation of **RPYYADYSPTRR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1623.7195

Variable modifications:

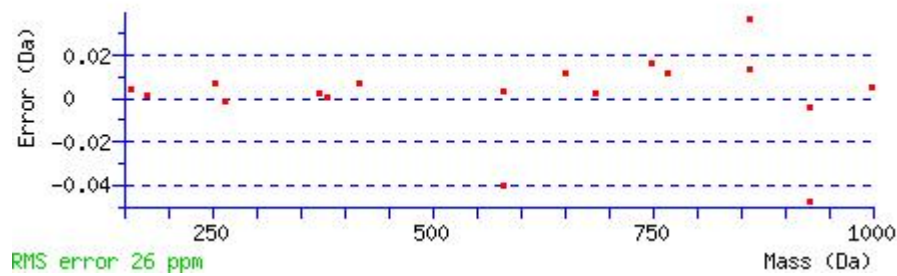
S8 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 46 Expect: 0.056

Matches : 18/184 fragment ions using 29 most intense peaks ([help](#))

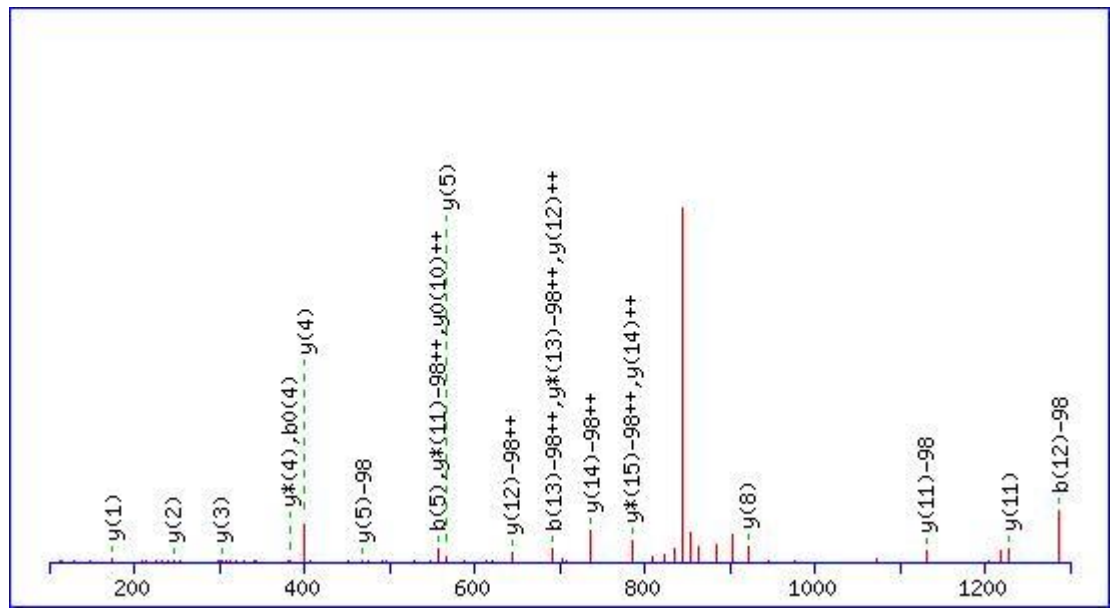
#	b	b ⁺⁺	b [*]	b ^{*++}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	157.1084	79.0578	140.0818	70.5446			R							1
2	254.1612	127.584 2	237.1346	119.070 9			P	1370.648 8	685.828 0	1353.622 2	677.314 8	1352.638 2	676.822 7	1
3	417.2245	209.115 9	400.1979	200.602 6			Y	1273.596 0	637.301 6	1256.569 5	628.788 4	1255.585 4	628.296 4	1
4	580.2878	290.647 5	563.2613	282.134 3			Y	1110.532 7	555.770 0	1093.506 1	547.256 7	1092.522 1	546.764 7	9
5	651.3249	326.166 1	634.2984	317.652 8			A	947.4694	474.238 3	930.4428	465.725 0	929.4588	465.233 0	8
6	766.3519	383.679 6	749.3253	375.166 3	748.3413	374.674 3	D	876.4322	438.719 8	859.4057	430.206 5	858.4217	429.714 5	7
7	929.4152	465.211 2	912.3886	456.698 0	911.4046	456.206 0	Y	761.4053	381.206 3	744.3787	372.693 0	743.3947	372.201 0	6
8	998.4367	499.722 0	981.4101	491.208 7	980.4261	490.716 7	S	598.3420	299.674 6	581.3154	291.161 3	580.3314	290.669 3	5
9	1095.489 4	548.248 3	1078.462 9	539.735 1	1077.478 9	539.243 1	P	529.3205	265.163 9	512.2940	256.650 6	511.3099	256.158 6	4

10	1196.5371	598.7722	1179.5106	590.2589	1178.5265	589.7669	T	432.2677	216.6375	415.2412	208.1242	414.2572	207.6322	3
11	1352.6382	676.8227	1335.6117	668.3095	1334.6276	667.8175	R	331.2201	166.1137	314.1935	157.6004			2
12							R	175.1190	88.0631	158.0924	79.5498			1



33_MS/MS Fragmentation of **VDADRPPLQESPGAR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1783.8254

Variable modifications:

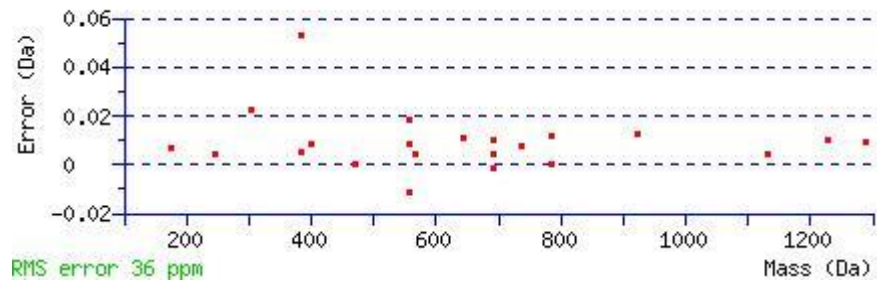
S12 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

Ions Score: 50 Expect: 0.028

Matches : 22/252 fragment ions using 23 most intense peaks ([help](#))

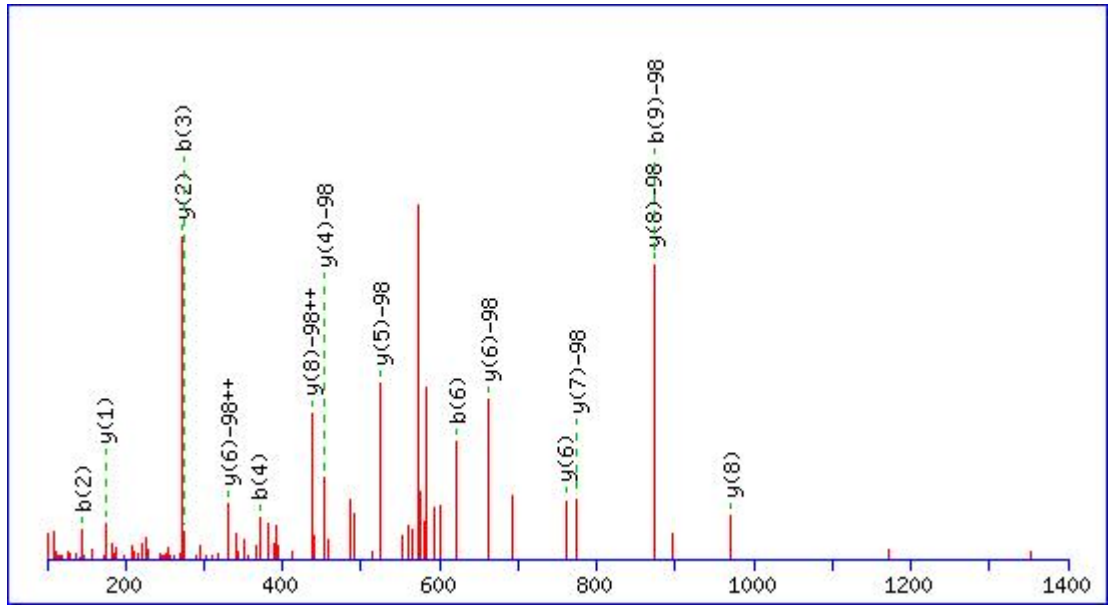
#	b	b ⁺⁺	b [*]	b ^{***}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	100.0757	50.5415					V							1
2	215.1026	108.0550			197.0921	99.0497	D	1685.7643	843.3858	1668.7377	834.8725	1667.7537	834.3805	15
3	286.1397	143.5735			268.1292	134.5682	A	1570.7373	785.8723	1553.7108	777.3590	1552.7268	776.8670	14
4	401.1667	201.0870			383.1561	192.0817	D	1499.7002	750.3538	1482.6737	741.8405	1481.6897	741.3485	13
5	557.2678	279.1375	540.2413	270.6243	539.2572	270.1323	R	1384.6733	692.8403	1367.6467	684.3270	1366.6627	683.8350	12
6	654.3206	327.6639	637.2940	319.1506	636.3100	318.6586	P	1228.5722	614.7897	1211.5456	606.2765	1210.5616	605.7844	11
7	751.3733	376.1903	734.3468	367.6770	733.3628	367.1850	P	1131.5194	566.2633	1114.4929	557.7501	1113.5089	557.2581	10
8	864.4574	432.7323	847.4308	424.2191	846.4468	423.7271	L	1034.4667	517.7370	1017.4401	509.2237	1016.4561	508.7317	9
9	961.5102	481.2587	944.4836	472.7454	943.4996	472.2534	P	921.3826	461.1949	904.3560	452.6817	903.3720	452.1896	8

10	1089.5687	545.2880	1072.5422	536.7747	1071.5582	536.2827	Q	824.3298	412.6686	807.3033	404.1553	806.3193	403.6633	7
11	1218.6113	609.8093	1201.5848	601.2960	1200.6008	600.8040	E	696.2712	348.6393	679.2447	340.1260	678.2607	339.6340	6
12	1385.6097	693.3085	1368.5831	684.7952	1367.5991	684.3032	S	567.2287	284.1180	550.2021	275.6047	549.2181	275.1127	5
13	1482.6625	741.8349	1465.6359	733.3216	1464.6519	732.8296	P	400.2303	200.6188	383.2037	192.1055			4
14	1539.6839	770.3456	1522.6574	761.8323	1521.6734	761.3403	G	303.1775	152.0924	286.1510	143.5791			3
15	1610.7210	805.8642	1593.6945	797.3509	1592.7105	796.8589	A	246.1561	123.5817	229.1295	115.0684			2
16							R	175.1190	88.0631	158.0924	79.5498			1



34_MS/MS Fragmentation of **SGEPLHALSPR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1242.5758

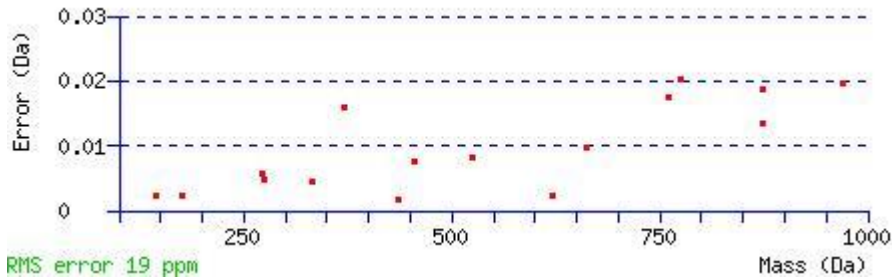
Variable modifications:

S9 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

Ions Score: 62 Expect: 0.0013

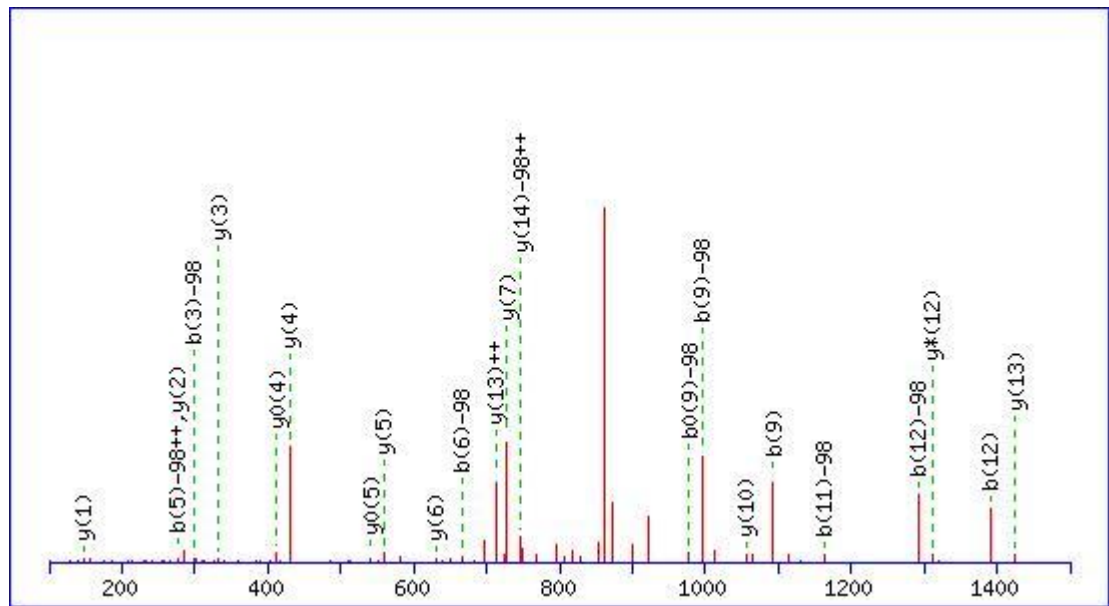
Matches : 16/152 fragment ions using 18 most intense peaks ([help](#))

#	b	b ⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	88.0393	44.5233	70.0287	35.5180	S							11
2	145.0608	73.0340	127.0502	64.0287	G	1058.5742	529.7907	1041.5476	521.2774	1040.5636	520.7854	10
3	274.1034	137.5553	256.0928	128.5500	E	1001.5527	501.2800	984.5261	492.7667	983.5421	492.2747	9
4	371.1561	186.0817	353.1456	177.0764	P	872.5101	436.7587	855.4835	428.2454	854.4995	427.7534	8
5	484.2402	242.6237	466.2296	233.6185	L	775.4573	388.2323	758.4308	379.7190	757.4468	379.2270	7
6	621.2991	311.1532	603.2885	302.1479	H	662.3733	331.6903	645.3467	323.1770	644.3627	322.6850	6
7	692.3362	346.6717	674.3257	337.6665	A	525.3144	263.1608	508.2878	254.6475	507.3038	254.1555	5
8	805.4203	403.2138	787.4097	394.2085	L	454.2772	227.6423	437.2507	219.1290	436.2667	218.6370	4
9	874.4417	437.7245	856.4312	428.7192	S	341.1932	171.1002	324.1666	162.5870	323.1826	162.0949	3
10	971.4945	486.2509	953.4839	477.2456	P	272.1717	136.5895	255.1452	128.0762			2
11					R	175.1190	88.0631	158.0924	79.5498			1



35_MS/MS Fragmentation of **IDSPRDTLDPAEPGEK**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1818.8037

Variable modifications:

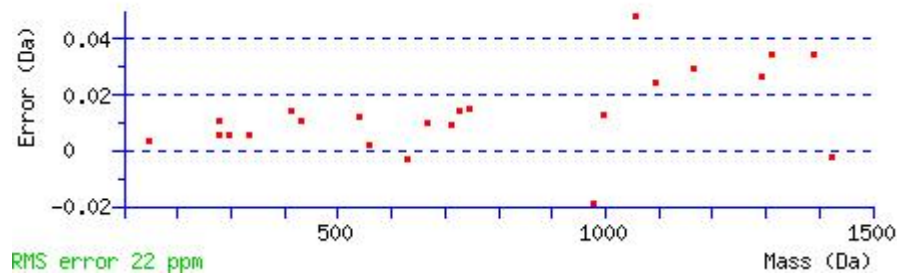
S3 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

Ions Score: 55 Expect: 0.0083

Matches : 23/254 fragment ions using 38 most intense peaks ([help](#))

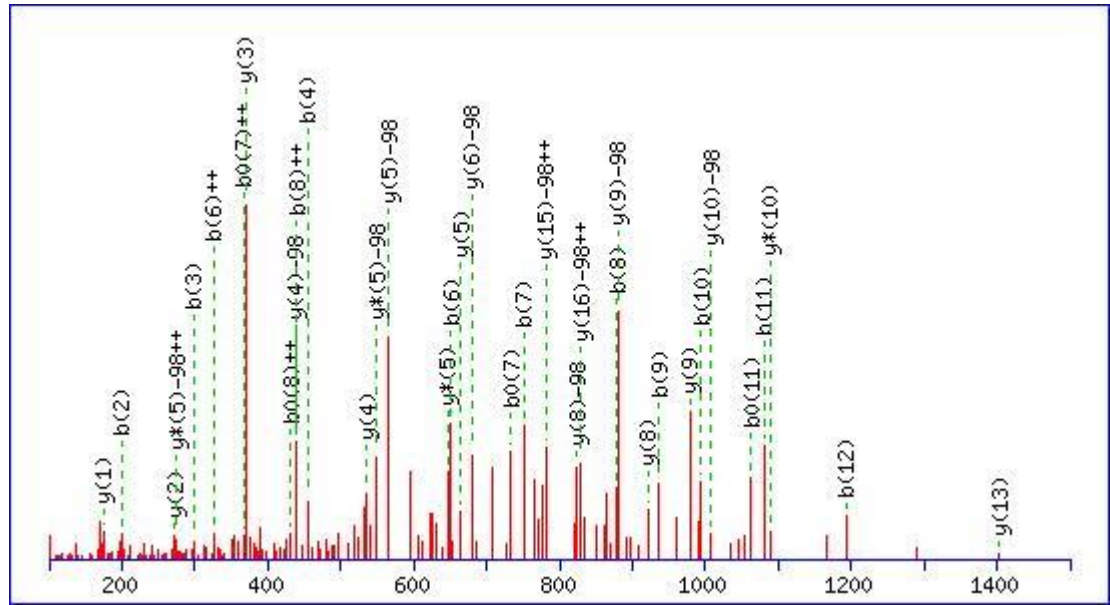
#	b	b ⁺⁺	b [*]	b ^{***}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	114.0913	57.5493					I							16
2	229.1183	115.0628			211.1077	106.0575	D	1706.7269	853.8671	1689.7004	845.3538	1688.7163	844.8618	15
3	396.1166	198.5620			378.1061	189.5567	S	1591.7000	796.3536	1574.6734	787.8403	1573.6894	787.3483	14
4	493.1694	247.0883			475.1588	238.0831	P	1424.7016	712.8544	1407.6751	704.3412	1406.6910	703.8492	13
5	649.2705	325.1389	632.2440	316.6256	631.2600	316.1336	R	1327.6488	664.3281	1310.6223	655.8148	1309.6383	655.3228	12
6	764.2975	382.6524	747.2709	374.1391	746.2869	373.6471	D	1171.5477	586.2775	1154.5212	577.7642	1153.5372	577.2722	11
7	865.3451	433.1762	848.3186	424.6629	847.3346	424.1709	T	1056.5208	528.7640	1039.4942	520.2508	1038.5102	519.7587	10
8	978.4292	489.7182	961.4027	481.2050	960.4186	480.7130	L	955.4731	478.2402	938.4466	469.7269	937.4625	469.2349	9
9	1093.4561	547.2317	1076.4296	538.7184	1075.4456	538.2264	D	842.3890	421.6982	825.3625	413.1849	824.3785	412.6929	8

10	1190.5089	595.7581	1173.4824	587.2448	1172.4983	586.7528	P	727.3621	364.1847	710.3355	355.6714	709.3515	355.1794	7
11	1261.5460	631.2767	1244.5195	622.7634	1243.5355	622.2714	A	630.3093	315.6583	613.2828	307.1450	612.2988	306.6530	6
12	1390.5886	695.7979	1373.5621	687.2847	1372.5781	686.7927	E	559.2722	280.1397	542.2457	271.6265	541.2617	271.1345	5
13	1487.6414	744.3243	1470.6148	735.8111	1469.6308	735.3190	P	430.2296	215.6185	413.2031	207.1052	412.2191	206.6132	4
14	1544.6628	772.8351	1527.6363	764.3218	1526.6523	763.8298	G	333.1769	167.0921	316.1503	158.5788	315.1663	158.0868	3
15	1673.7054	837.3564	1656.6789	828.8431	1655.6949	828.3511	E	276.1554	138.5813	259.1288	130.0681	258.1448	129.5761	2
16							K	147.1128	74.0600	130.0863	65.5468			1



36_MS/MS Fragmentation of **TPVRPVTQGGSLQSPPR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1855.9306

Variable modifications:

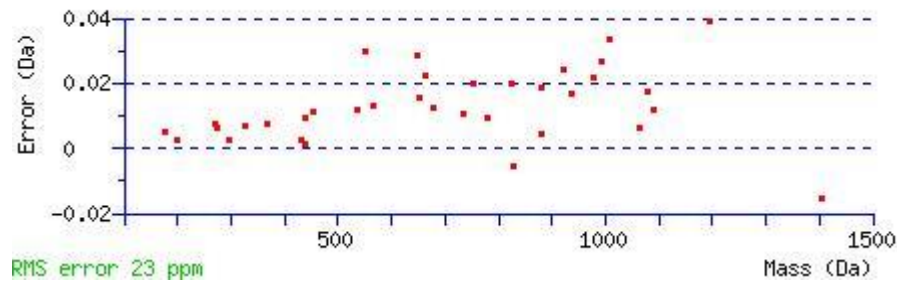
S14 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

Ions Score: 91 Expect: 2.2e-006

Matches : 36/276 fragment ions using 44 most intense peaks ([help](#))

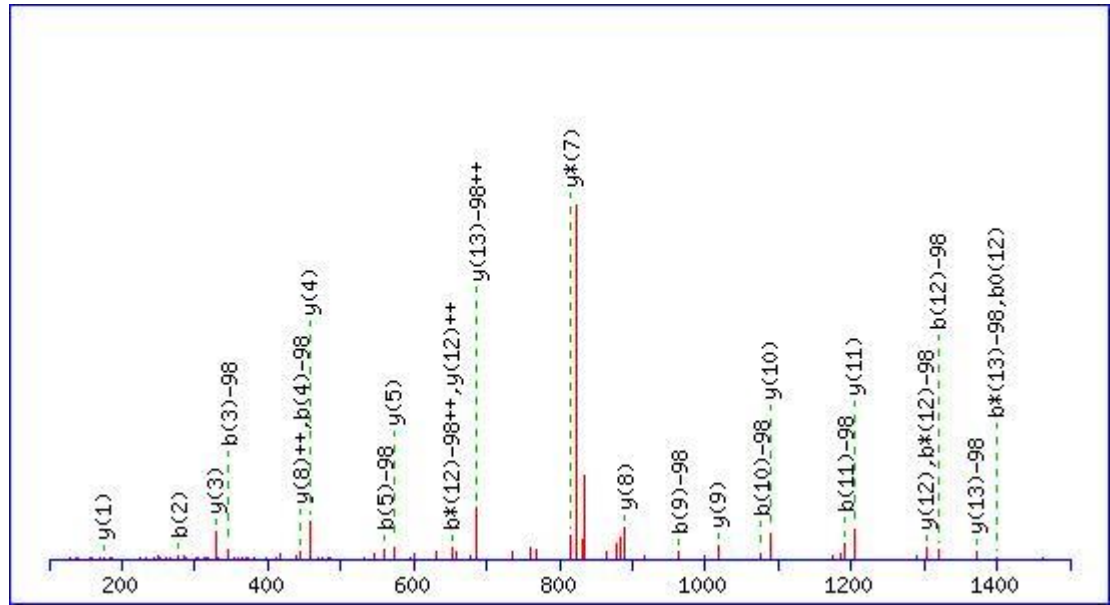
#	b	b ⁺⁺	b [*]	b ^{*++}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{*++}	y ⁰	y ⁰⁺⁺	#
1	102.0550	51.5311			84.0444	42.5258	T							1
2	199.1077	100.057			181.0972	91.0522	P	1755.890	878.448	1738.863	869.935	1737.879	869.443	1
		5						2	7	6	4	6	4	6
3	298.1761	149.591			280.1656	140.586	V	1658.837	829.922	1641.810	821.409	1640.826	820.917	1
		7				4		4	3	8	1	8	1	5
4	454.2772	227.642	437.2507	219.129	436.2667	218.637	R	1559.769	780.388	1542.742	771.874	1541.758	771.382	1
		3		0		0		0	1	4	9	4	8	4
5	551.3300	276.168	534.3035	267.655	533.3194	267.163	P	1403.667	702.337	1386.641	693.824	1385.657	693.332	1
		6		4		4		9	6	3	3	3	3	3
6	650.3984	325.702	633.3719	317.189	632.3879	316.697	V	1306.615	653.811	1289.588	645.297	1288.604	644.805	1
		8		6		6		1	2	6	9	5	9	2
7	751.4461	376.226	734.4196	367.713	733.4355	367.221	T	1207.546	604.277	1190.520	595.763	1189.536	595.271	1
		7		4		4		7	0	1	7	1	7	1
8	879.5047	440.256	862.4781	431.742	861.4941	431.250	Q	1106.499	553.753	1089.472	545.239	1088.488	544.747	1
		0		7		7		0	1	5	9	5	9	0
9	936.5261	468.766	919.4996	460.253	918.5156	459.761	G	978.4404	489.723	961.4139	481.210	960.4299	480.718	9
		7		4		4			9		6		6	

10	993.5476	497.2774	976.5211	488.7642	975.5370	488.2722	G	921.4190	461.2131	904.3924	452.6999	903.4084	452.2078	8
11	1080.5796	540.7935	1063.5531	532.2802	1062.5691	531.7882	S	864.3975	432.7024	847.3710	424.1891	846.3869	423.6971	7
12	1193.6637	597.3355	1176.6372	588.8222	1175.6531	588.3302	L	777.3655	389.1864	760.3389	380.6731	759.3549	380.1811	6
13	1321.7223	661.3648	1304.6957	652.8515	1303.7117	652.3595	Q	664.2814	332.6443	647.2549	324.1311	646.2709	323.6391	5
14	1488.7206	744.8640	1471.6941	736.3507	1470.7101	735.8587	S	536.2228	268.6151	519.1963	260.1018	518.2123	259.6098	4
15	1585.7734	793.3903	1568.7469	784.8771	1567.7628	784.3851	P	369.2245	185.1159	352.1979	176.6026			3
16	1682.8262	841.9167	1665.7996	833.4034	1664.8156	832.9114	P	272.1717	136.5895	255.1452	128.0762			2
17							R	175.1190	88.0631	158.0924	79.5498			1



37_MS/MS Fragmentation of **LYSVDAQGFLDKPGR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1744.8185

Variable modifications:

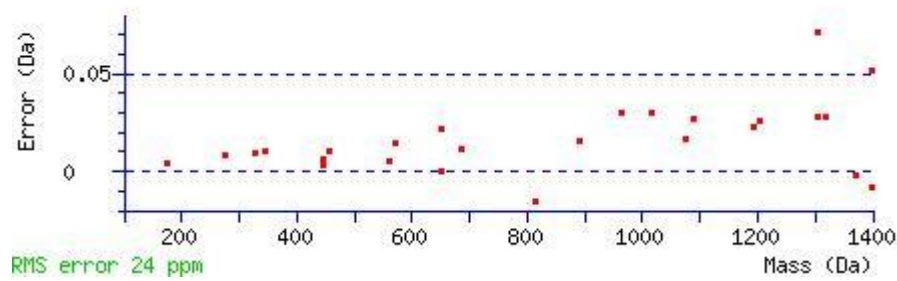
S3 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

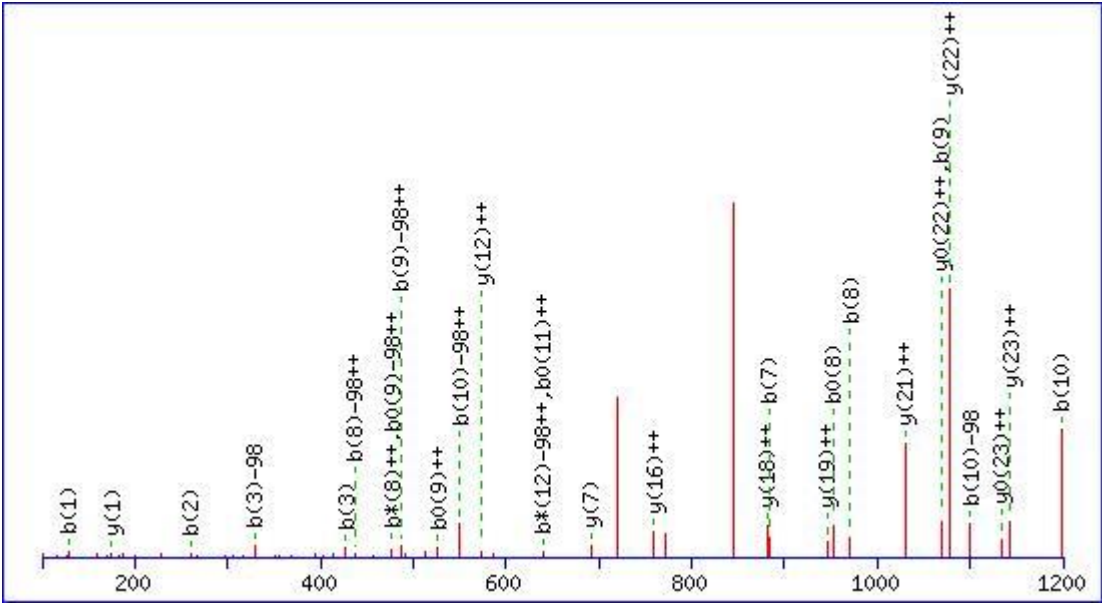
Ions Score: 92 Expect: 1.8e-006

Matches : 26/220 fragment ions using 27 most intense peaks ([help](#))

#	b	b ⁺⁺	b [*]	b ^{***}	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ^{***}	y ⁰	y ⁰⁺⁺	#
1	114.0913	57.5493					L							1
2	277.1547	139.0810					Y	1534.7649	767.8861	1517.7383	759.3728	1516.7543	758.8808	14
3	346.1761	173.5917			328.1656	164.5864	S	1371.7015	686.3544	1354.6750	677.8411	1353.6910	677.3491	13
4	445.2445	223.1259			427.2340	214.1206	V	1302.6801	651.8437	1285.6535	643.3304	1284.6695	642.8384	12
5	560.2715	280.6394			542.2609	271.6341	D	1203.6117	602.3095	1186.5851	593.7962	1185.6011	593.3042	11
6	631.3086	316.1579			613.2980	307.1527	A	1088.5847	544.7960	1071.5582	536.2827	1070.5742	535.7907	10
7	759.3672	380.1872	742.3406	371.6740	741.3566	371.1819	Q	1017.5476	509.2774	1000.5211	500.7642	999.5370	500.2722	9
8	816.3886	408.6980	799.3621	400.1847	798.3781	399.6927	G	889.4890	445.2482	872.4625	436.7349	871.4785	436.2429	8
9	963.4571	482.2322	946.4305	473.7189	945.4465	473.2269	F	832.4676	416.7374	815.4410	408.2241	814.4570	407.7321	7

10	1076.5411	538.7742	1059.5146	530.2609	1058.5306	529.7689	L	685.3991	343.2032	668.3726	334.6899	667.3886	334.1979	6
11	1191.5681	596.2877	1174.5415	587.7744	1173.5575	587.2824	D	572.3151	286.6612	555.2885	278.1479	554.3045	277.6559	5
12	1319.6630	660.3352	1302.6365	651.8219	1301.6525	651.3299	K	457.2881	229.1477	440.2616	220.6344			4
13	1416.7158	708.8615	1399.6892	700.3483	1398.7052	699.8563	P	329.1932	165.1002	312.1666	156.5870			3
14	1473.7373	737.3723	1456.7107	728.8590	1455.7267	728.3670	G	232.1404	116.5738	215.1139	108.0606			2
15							R	175.1190	88.0631	158.0924	79.5498			1





Monoisotopic mass of neutral peptide Mr(calc): 3352.4774

Variable modifications:

S3 : Phospho (ST), with neutral losses 0.0000(shown in table), 97.9769

C6 : Methylthio (C)

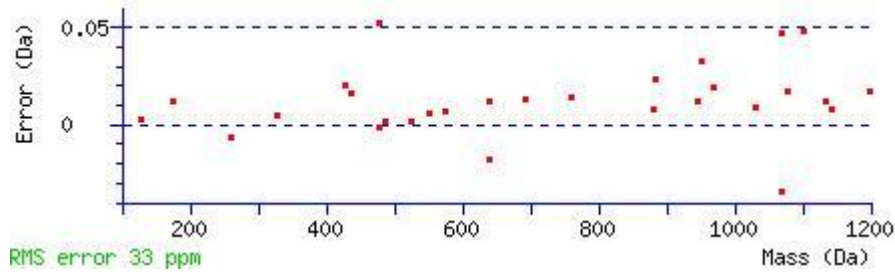
Ions Score: 42 Expect: 0.26

Matches : 29/550 fragment ions using 43 most intense peaks ([help](#))

#	b	b ⁺⁺	b [*]	b ⁺⁺⁺	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ⁺⁺⁺	y ⁰	y ⁰⁺⁺	#
1	129.102 2	65.0548	112.075 7	56.5415			K							3 2
2	260.142 7	130.575 0	243.116 2	122.061 7			M	3225.38 98	1613.19 85	3208.36 33	1604.68 53	3207.37 92	1604.19 33	3 1
3	427.141 1	214.074 2	410.114 5	205.560 9	409.130 5	205.068 9	S	3094.34 93	1547.67 83	3077.32 28	1539.16 50	3076.33 88	1538.67 30	3 0
4	524.193 8	262.600 6	507.167 3	254.087 3	506.183 3	253.595 3	P	2927.35 10	1464.17 91	2910.32 44	1455.66 58	2909.34 04	1455.17 38	2 9
5	621.246 6	311.126 9	604.220 1	302.613 7	603.236 0	302.121 7	P	2830.29 82	1415.65 27	2813.27 17	1407.13 95	2812.28 76	1406.64 75	2 8
6	770.243 5	385.625 4	753.217 0	377.112 1	752.233 0	376.620 1	C	2733.24 54	1367.12 64	2716.21 89	1358.61 31	2715.23 49	1358.12 11	2 7
7	883.327 6	442.167 4	866.301 0	433.654 2	865.317 0	433.162 1	I	2584.24 85	1292.62 79	2567.22 20	1284.11 46	2566.23 80	1283.62 26	2 6
8	970.359 6	485.683 4	953.333 1	477.170 2	952.349 0	476.678 2	S	2471.16 45	1236.08 59	2454.13 79	1227.57 26	2453.15 39	1227.08 06	2 5
9	1069.42 80	535.217 6	1052.40 15	526.704 4	1051.41 75	526.212 4	V	2384.13 24	1192.56 99	2367.10 59	1184.05 66	2366.12 19	1183.56 46	2 4

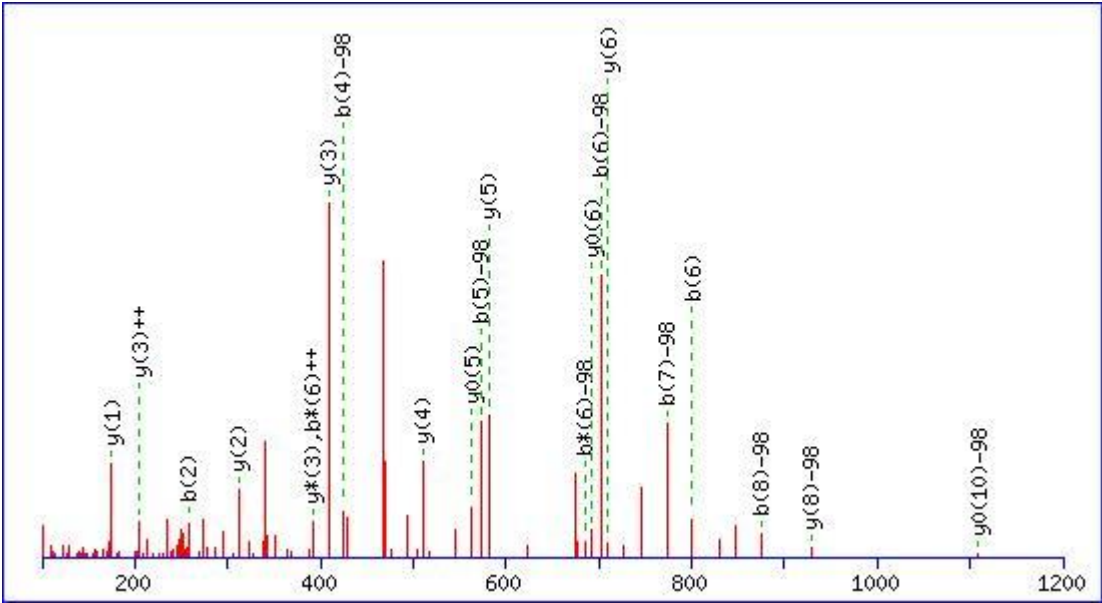
10	1198.4706	599.7389	1181.4441	591.2257	1180.4601	590.7337	E	2285.0640	1143.0356	2268.0375	1134.5224	2267.0535	1134.0304	23
11	1295.5234	648.2653	1278.4968	639.7521	1277.5128	639.2600	P	2156.0214	1078.5144	2138.9949	1070.0011	2138.0109	1069.5091	22
12	1392.5761	696.7917	1375.5496	688.2784	1374.5656	687.7864	P	2058.9687	1029.9880	2041.9421	1021.4747	2040.9581	1020.9827	21
13	1463.6133	732.3103	1446.5867	723.7970	1445.6027	723.3050	A	1961.9159	981.4616	1944.8894	972.9483	1943.9053	972.4563	20
14	1592.6559	796.8316	1575.6293	788.3183	1574.6453	787.8263	E	1890.8788	945.9430	1873.8522	937.4298	1872.8682	936.9378	19
15	1707.6828	854.3450	1690.6562	845.8318	1689.6722	845.3398	D	1761.8362	881.4217	1744.8096	872.9085	1743.8256	872.4165	18
16	1836.7254	918.8663	1819.6988	910.3531	1818.7148	909.8610	E	1646.8093	823.9083	1629.7827	815.3950	1628.7987	814.9030	17
17	1893.7469	947.3771	1876.7203	938.8638	1875.7363	938.3718	G	1517.7667	759.3870	1500.7401	750.8737	1499.7561	750.3817	16
18	1980.7789	990.8931	1963.7523	982.3798	1962.7683	981.8878	S	1460.7452	730.8762	1443.7186	722.3630	1442.7346	721.8710	15
19	2051.8160	1026.4116	2034.7894	1017.8984	2033.8054	1017.4064	A	1373.7132	687.3602	1356.6866	678.8469	1355.7026	678.3549	14
20	2207.9171	1104.4622	2190.8906	1095.9489	2189.9065	1095.4569	R	1302.6761	651.8417	1285.6495	643.3284	1284.6655	642.8364	13
21	2304.9699	1152.9886	2287.9433	1144.4753	2286.9593	1143.9833	P	1146.5749	573.7911	1129.5484	565.2778	1128.5644	564.7858	12
22	2392.0019	1196.5046	2374.9753	1187.9913	2373.9913	1187.4993	S	1049.5222	525.2647	1032.4956	516.7515	1031.5116	516.2594	11
23	2463.0390	1232.0231	2446.0125	1223.5099	2445.0284	1223.0179	A	962.4902	481.7487	945.4636	473.2354	944.4796	472.7434	10
24	2534.0761	1267.5417	2517.0496	1259.0284	2516.0656	1258.5364	A	891.4530	446.2302	874.4265	437.7169	873.4425	437.2249	9
25	2663.1187	1332.0630	2646.0922	1323.5497	2645.1082	1323.0577	E	820.4159	410.7116	803.3894	402.1983	802.4054	401.7063	8
26	2720.1402	1360.5737	2703.1136	1352.0605	2702.1296	1351.5684	G	691.3733	346.1903	674.3468	337.6770	673.3628	337.1850	7
27	2777.1616	1389.0845	2760.1351	1380.5712	2759.1511	1380.0792	G	634.3519	317.6796	617.3253	309.1663	616.3413	308.6743	6
28	2864.1937	1432.6005	2847.1671	1424.0872	2846.1831	1423.5952	S	577.3304	289.1688	560.3039	280.6556	559.3198	280.1636	5

<div>29</div> <div>30</div> <div>31</div> <div>32</div>	<div>2965.24</div> <div>14</div> <div>3066.28</div> <div>90</div> <div>3179.37</div> <div>31</div> <div></div>	<div>1483.12</div> <div>43</div> <div>1533.64</div> <div>82</div> <div>1590.19</div> <div>02</div> <div></div>	<div>2948.21</div> <div>48</div> <div>3049.26</div> <div>25</div> <div>3162.34</div> <div>65</div> <div></div>	<div>1474.61</div> <div>10</div> <div>1525.13</div> <div>49</div> <div>1581.67</div> <div>69</div> <div></div>	<div>2947.23</div> <div>08</div> <div>3048.27</div> <div>85</div> <div>3161.36</div> <div>25</div> <div></div>	<div>1474.11</div> <div>90</div> <div>1524.64</div> <div>29</div> <div>1581.18</div> <div>49</div> <div></div>	<div>T</div> <div>T</div> <div>L</div> <div>R</div>	<div>490.298</div> <div>4</div> <div>389.250</div> <div>7</div> <div>288.203</div> <div>0</div> <div>175.1190</div>	<div>245.652</div> <div>8</div> <div>195.129</div> <div>0</div> <div>144.605</div> <div>1</div> <div>88.0631</div>	<div>473.271</div> <div>8</div> <div>372.224</div> <div>1</div> <div>271.176</div> <div>5</div> <div>158.0924</div>	<div>237.139</div> <div>6</div> <div>186.615</div> <div>7</div> <div>136.091</div> <div>9</div> <div>79.5498</div>	<div>472.287</div> <div>8</div> <div>371.240</div> <div>1</div> <div></div> <div></div> <div></div>	<div>236.647</div> <div>5</div> <div>186.123</div> <div>7</div> <div></div> <div></div> <div></div>	<div>4</div> <div>3</div> <div>2</div> <div>1</div>
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39_MS/MS Fragmentation of **RTPSCEATPHR**

Found in **O95180**, Voltage-dependent T-type calcium channel subunit alpha-1H OS=Homo sapiens GN=CACNA1H PE=1 SV=4



Monoisotopic mass of neutral peptide Mr(calc): 1379.5475

Variable modifications:

S4 : Phospho (ST), with neutral losses 97.9769(shown in table), 0.0000

C5 : Methylthio (C)

Ions Score: 46 Expect: 0.036

Matches : 22/172 fragment ions using 34 most intense peaks ([help](#))

#	b	b ⁺⁺	b [*]	b ⁺⁺⁺	b ⁰	b ⁰⁺⁺	Seq	y	y ⁺⁺	y [*]	y ⁺⁺⁺	y ⁰	y ⁰⁺⁺	#
1	157.1084	79.0578	140.0818	70.5446			R							1
2	258.1561	129.581 7	241.1295	121.068 4	240.1455	120.576 4	T	1126.476 8	563.742 1	1109.450 3	555.228 8	1108.466 3	554.736 8	10
3	355.2088	178.108 1	338.1823	169.594 8	337.1983	169.102 8	P	1025.429 1	513.218 2	1008.402 6	504.704 9	1007.418 6	504.212 9	9
4	424.2303	212.618 8	407.2037	204.105 5	406.2197	203.613 5	S	928.3764	464.691 8	911.3498	456.178 6	910.3658	455.686 5	8
5	573.2272	287.117 2	556.2006	278.604 0	555.2166	278.112 0	C	859.3549	430.181 1	842.3284	421.667 8	841.3444	421.175 8	7
6	702.2698	351.638 5	685.2432	343.125 3	684.2592	342.633 3	E	710.3580	355.682 6	693.3315	347.169 4	692.3474	346.677 4	6
7	773.3069	387.157 1	756.2804	378.643 8	755.2963	378.151 8	A	581.3154	291.161 3	564.2889	282.648 1	563.3049	282.156 1	5
8	874.3546	437.680 9	857.3280	429.167 7	856.3440	428.675 6	T	510.2783	255.642 8	493.2518	247.129 5	492.2677	246.637 5	4
9	971.4073	486.207 3	954.3808	477.694 0	953.3968	477.202 0	P	409.2306	205.119 0	392.2041	196.605 7			3

1	1108.466	554.736	1091.439	546.223	1090.455	545.731	H	312.1779	156.592	295.1513	148.079			2
0	3	8	7	5	7	5			6		3			
1							R	175.1190	88.0631	158.0924	79.5498			1
1														

