

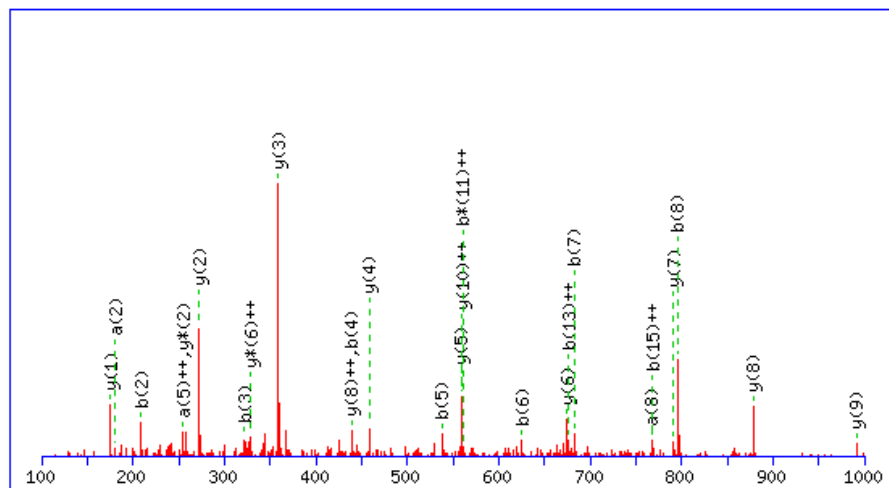
Supplementary Figure 2. Exemplary MS/MS spectra of IGOT-peptides derived from candidate glycoproteins verified in this study.

MS/MS spectra with annotations (assignment of signals to a series of fragment ions) and tabular results of assigned fragment ions by Mascot program are shown for each IGOT peptide.

MS/MS Fragmentation of AHLNVSGIPCSVLLADVEDLIQQQISNDTVSPR

Found in gi|126273559 in Ref_human, carboxypeptidase B2 isoform b precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

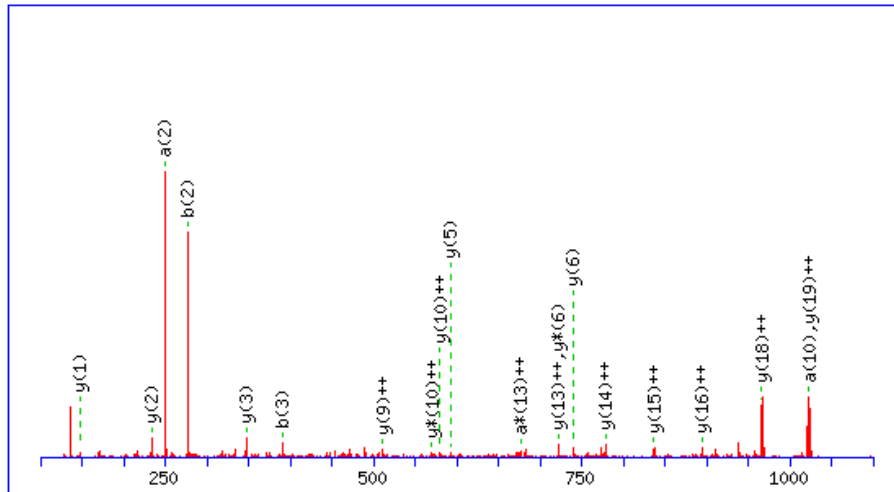


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	44.0495	22.5284			72.0444	36.5258			A					33
2	181.1084	91.0578			209.1033	105.0553			H	3523.7720	1762.3897	3506.7455	1753.8764	32
3	294.1925	147.5999			322.1874	161.5973			L	3386.7131	1693.8602	3369.6866	1685.3469	31
4	411.2236	206.1155	394.1971	197.6022	439.2186	220.1129	422.1920	211.5996	N	3273.6291	1637.3182	3256.6025	1628.8049	30
5	510.2921	255.6497	493.2655	247.1364	538.2870	269.6471	521.2604	261.1338	V	3156.5979	1578.8026	3139.5713	1570.2893	29
6	597.3241	299.1657	580.2975	290.6524	625.3190	313.1631	608.2924	304.6499	S	3057.5295	1529.2684	3040.5029	1520.7551	28
7	654.3455	327.6764	637.3190	319.1631	682.3405	341.6739	665.3139	333.1606	G	2970.4974	1485.7524	2953.4709	1477.2391	27
8	767.4296	384.2184	750.4031	375.7052	795.4245	398.2159	778.3980	389.7026	I	2913.4760	1457.2416	2896.4494	1448.7284	26
9	864.4824	432.7448	847.4558	424.2316	892.4773	446.7423	875.4507	438.2290	P	2800.3919	1400.6996	2783.3654	1392.1863	25
10	1024.5130	512.7601	1007.4865	504.2469	1052.5079	526.7576	1035.4814	518.2443	C	2703.3391	1352.1732	2686.3126	1343.6599	24
11	1111.5451	556.2762	1094.5185	547.7629	1139.5400	570.2736	1122.5134	561.7603	S	2543.3085	1272.1579	2526.2819	1263.6446	23
12	1210.6135	605.8104	1193.5869	597.2971	1238.6084	619.8078	1221.5818	611.2946	V	2456.2765	1228.6419	2439.2499	1220.1286	22
13	1323.6975	662.3524	1306.6710	653.8391	1351.6924	676.3499	1334.6659	667.8366	L	2357.2081	1179.1077	2340.1815	1170.5944	21
14	1436.7816	718.8944	1419.7550	710.3812	1464.7765	732.8919	1447.7500	724.3786	L	2244.1240	1122.5656	2227.0974	1114.0524	20
15	1507.8187	754.4130	1490.7922	745.8997	1535.8136	768.4104	1518.7871	759.8972	A	2131.0399	1066.0236	2114.0134	1057.5103	19
16	1622.8456	811.9265	1605.8191	803.4132	1650.8406	825.9239	1633.8140	817.4106	D	2060.0028	1030.5050	2042.9763	1021.9918	18
17	1721.9141	861.4607	1704.8875	852.9474	1749.9090	875.4581	1732.8824	866.9449	V	1944.9759	972.9916	1927.9493	964.4783	17
18	1850.9567	925.9820	1833.9301	917.4687	1878.9516	939.9794	1861.9250	931.4661	E	1845.9075	923.4574	1828.8809	914.9441	16
19	1965.9836	983.4954	1948.9571	974.9822	1993.9785	997.4929	1976.9520	988.9796	D	1716.8649	858.9361	1699.8383	850.4228	15
20	2079.0677	1040.0375	2062.0411	1031.5242	2107.0626	1054.0349	2090.0360	1045.5217	L	1601.8379	801.4226	1584.8114	792.9093	14
21	2192.1517	1096.5795	2175.1252	1088.0662	2220.1466	1110.5770	2203.1201	1102.0637	I	1488.7539	744.8806	1471.7273	736.3673	13
22	2320.2103	1160.6088	2303.1838	1152.0955	2348.2052	1174.6062	2331.1787	1166.0930	Q	1375.6698	688.3385	1358.6432	679.8253	12
23	2448.2689	1224.6381	2431.2423	1216.1248	2476.2638	1238.6355	2459.2372	1230.1223	Q	1247.6112	624.3092	1230.5847	615.7960	11
24	2576.3275	1288.6674	2559.3009	1280.1541	2604.3224	1302.6648	2587.2958	1294.1516	Q	1119.5526	560.2800	1102.5261	551.7667	10
25	2689.4115	1345.2094	2672.3850	1336.6961	2717.4064	1359.2069	2700.3799	1350.6936	I	991.4941	496.2507	974.4675	487.7374	9
26	2776.4436	1388.7254	2759.4170	1380.2121	2804.4385	1402.7229	2787.4119	1394.2096	S	878.4100	439.7086	861.3834	431.1954	8
27	2893.4747	1447.2410	2876.4482	1438.7277	2921.4697	1461.2385	2904.4431	1452.7252	N	791.3780	396.1926	774.3514	387.6793	7
28	3008.5017	1504.7545	2991.4751	1496.2412	3036.4966	1518.7519	3019.4701	1510.2387	D	674.3468	337.6770	657.3202	329.1638	6
29	3109.5494	1555.2783	3092.5228	1546.7650	3137.5443	1569.2758	3120.5177	1560.7625	T	559.3198	280.1636	542.2933	271.6503	5
30	3208.6178	1604.8125	3191.5912	1596.2993	3236.6127	1618.8100	3219.5861	1610.2967	V	458.2722	229.6397	441.2456	221.1264	4
31	3295.6498	1648.3285	3278.6233	1639.8153	3323.6447	1662.3260	3306.6182	1653.8127	S	359.2037	180.1055	342.1772	171.5922	3
32	3392.7026	1696.8549	3375.6760	1688.3416	3420.6975	1710.8524	3403.6709	1702.3391	P	272.1717	136.5895	255.1452	128.0762	2
33									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of LYLGSNNLTALHPALFQNLSK

Found in gi|256217721 in Ref_human, carboxypeptidase N subunit 2 precursor [Homo sapiens]

Sample: HepG2 medium AAL(+)

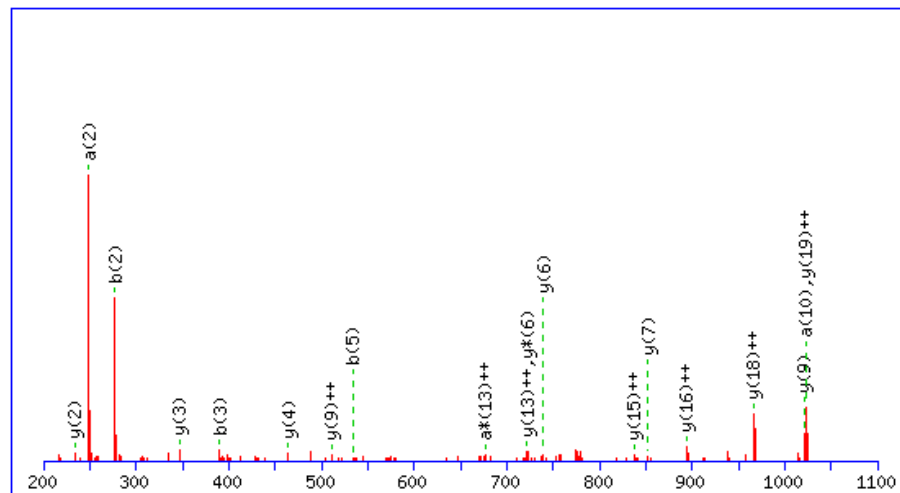


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	86.0964	43.5519			114.0913	57.5493			L					21
2	249.1598	125.0835			277.1547	139.0810			Y	2207.1479	1104.0776	2190.1213	1095.5643	20
3	362.2438	181.6255			390.2387	195.6230			L	2044.0845	1022.5459	2027.0580	1014.0326	19
4	419.2653	210.1363			447.2602	224.1337			G	1931.0005	966.0039	1913.9739	957.4906	18
5	506.2973	253.6523			534.2922	267.6498			S	1873.9790	937.4931	1856.9524	928.9799	17
6	620.3402	310.6738	603.3137	302.1605	648.3352	324.6712	631.3086	316.1579	N	1786.9470	893.9771	1769.9204	885.4638	16
7	737.3714	369.1894	720.3449	360.6761	765.3663	383.1868	748.3398	374.6735	N	1672.9040	836.9557	1655.8775	828.4424	15
8	850.4555	425.7314	833.4289	417.2181	878.4504	439.7288	861.4239	431.2156	L	1555.8729	778.4401	1538.8463	769.9268	14
9	951.5032	476.2552	934.4766	467.7419	979.4981	490.2527	962.4715	481.7394	T	1442.7888	721.8980	1425.7622	713.3848	13
10	1022.5403	511.7738	1005.5137	503.2605	1050.5352	525.7712	1033.5086	517.2580	A	1341.7411	671.3742	1324.7146	662.8609	12
11	1135.6243	568.3158	1118.5978	559.8025	1163.6193	582.3133	1146.5927	573.8000	L	1270.7040	635.8556	1253.6774	627.3424	11
12	1272.6833	636.8453	1255.6567	628.3320	1300.6782	650.8427	1283.6516	642.3294	H	1157.6199	579.3136	1140.5934	570.8003	10
13	1369.7360	685.3716	1352.7095	676.8584	1397.7309	699.3691	1380.7044	690.8558	P	1020.5610	510.7841	1003.5345	502.2709	9
14	1440.7731	720.8902	1423.7466	712.3769	1468.7681	734.8877	1451.7415	726.3744	A	923.5083	462.2578	906.4817	453.7445	8
15	1553.8572	777.4322	1536.8307	768.9190	1581.8521	791.4297	1564.8256	782.9164	L	852.4711	426.7392	835.4446	418.2259	7
16	1700.9256	850.9664	1683.8991	842.4532	1728.9205	864.9639	1711.8940	856.4506	F	739.3871	370.1972	722.3605	361.6839	6
17	1828.9842	914.9957	1811.9576	906.4825	1856.9791	928.9932	1839.9526	920.4799	Q	592.3187	296.6630	575.2921	288.1497	5
18	1946.0154	973.5113	1928.9888	964.9981	1974.0103	987.5088	1956.9837	978.9955	N	464.2601	232.6337	447.2335	224.1204	4
19	2059.0994	1030.0534	2042.0729	1021.5401	2087.0944	1044.0508	2070.0678	1035.5375	L	347.2289	174.1181	330.2023	165.6048	3
20	2146.1315	1073.5694	2129.1049	1065.0561	2174.1264	1087.5668	2157.0998	1079.0536	S	234.1448	117.5761	217.1183	109.0628	2
21									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of LYLGSNNLTALHPALFQNLSK

Found in gi|256217721 in Ref_human, carboxypeptidase N subunit 2 precursor [Homo sapiens]

Sample: HuH-7 medium AAL(+)

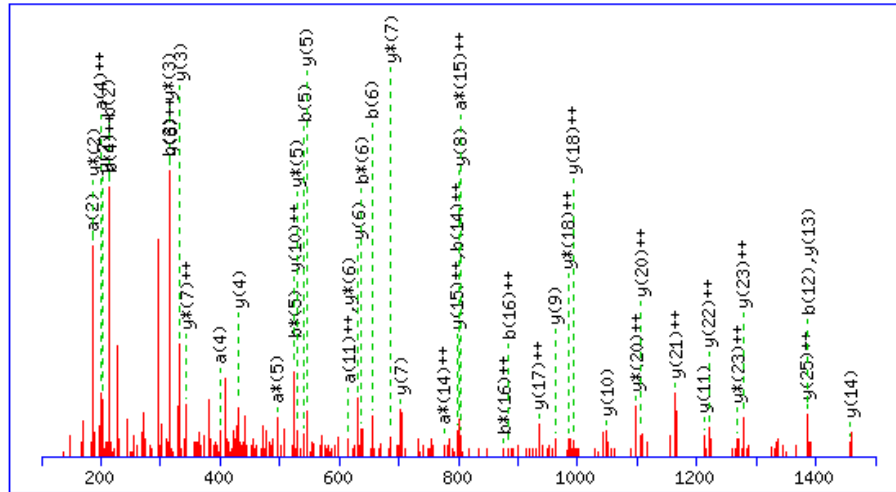


#	a	a ⁺⁺	a*	a ⁺⁺⁺	b	b ⁺⁺	b*	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y*	y ⁺⁺⁺	#
1	86.0964	43.5519			114.0913	57.5493			L	2207.1479	1104.0776	2190.1213	1095.5643	2
2	249.1598	125.0835			277.1547	139.0810			Y	2204.0845	1102.0759	2027.0580	1014.0326	1
3	362.2438	181.6255			390.2387	195.6230			L	1931.0005	966.0039	1913.9739	957.4906	1
4	419.2653	210.1363			447.2602	224.1337			G	1873.9790	937.9431	1856.9524	928.9799	1
5	506.2973	253.6523			534.2922	267.6498			S	1786.9400	893.9771	1769.9204	885.4638	1
6	620.3402	310.6738	603.3137	302.1605	648.3352	324.6712	631.3086	316.1579	N	1762.9040	836.9557	1655.8775	828.4424	1
7	737.3714	369.1894	720.3449	360.6761	765.3663	383.1868	748.3398	374.6735	N	1555.8729	778.4401	1538.8463	769.9268	1
8	850.4555	425.7314	833.4289	417.2181	878.4504	439.7288	861.4239	431.2156	L	1442.7888	721.8980	1425.7622	713.3848	1
9	951.5032	476.2552	934.4766	467.7419	979.4981	490.2527	962.4715	481.7394	T	1341.7411	671.3742	1324.7146	662.8609	1
10	1022.5403	511.7738	1005.5137	503.2605	1050.5352	525.7171	1033.5086	517.2580	A	1270.7040	635.8556	1253.6774	627.3424	1
11	1135.6243	568.3158	1118.5978	559.8025	1163.6193	582.3133	1146.5927	573.8000	L	1157.6199	579.3136	1140.5934	570.8003	1
12	1272.6833	636.8453	1255.6567	628.3320	1300.8762	650.8427	1283.6516	642.3294	H	1020.5610	510.7841	1003.5345	502.2709	1
13	1369.7360	685.3716	1352.7095	676.8584	1397.7309	699.3691	1380.7044	690.8558	P	923.5083	462.2578	906.4817	453.7445	1
14	1440.7731	720.8902	1423.7662	712.3769	1468.7681	734.8877	1451.7415	726.3744	A	852.4711	426.7392	835.4446	418.2259	1
15	1553.8572	777.4322	1536.8307	768.9190	1581.8521	791.4297	1564.8256	782.9164	L	739.3871	370.1972	722.3605	361.6839	1
16	1700.9256	850.9664	1683.8991	842.4532	1728.9205	864.9639	1711.8940	856.4506	F	592.3187	296.6630	575.2281	288.1497	1
17	1828.9842	914.9957	1811.9576	906.4825	1856.9791	928.9932	1839.9526	920.4799	Q	464.2601	232.6337	447.2335	224.1204	1
18	1946.0154	973.5113	1928.9888	964.9981	1974.0103	987.5088	1956.9837	978.9955	N	347.2289	174.1811	330.2023	165.6048	1
19	2059.0994	1030.0534	2042.0729	1021.5401	2087.0944	1044.0508	2070.0678	1035.5375	L	234.1448	117.5761	217.1183	109.0628	1
20	2146.1315	1073.5694	2129.1049	1065.0561	2174.1264	1087.5668	2157.0998	1079.0536	S	147.1128	74.0600	130.0863	65.5468	1
21									K					

MS/MS Fragmentation of VLTLNLDQVDFQHAGNYSCVASNVQ GK

Found in gi|27262659 in Ref_human, macrophage colony-stimulating factor 1 receptor precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

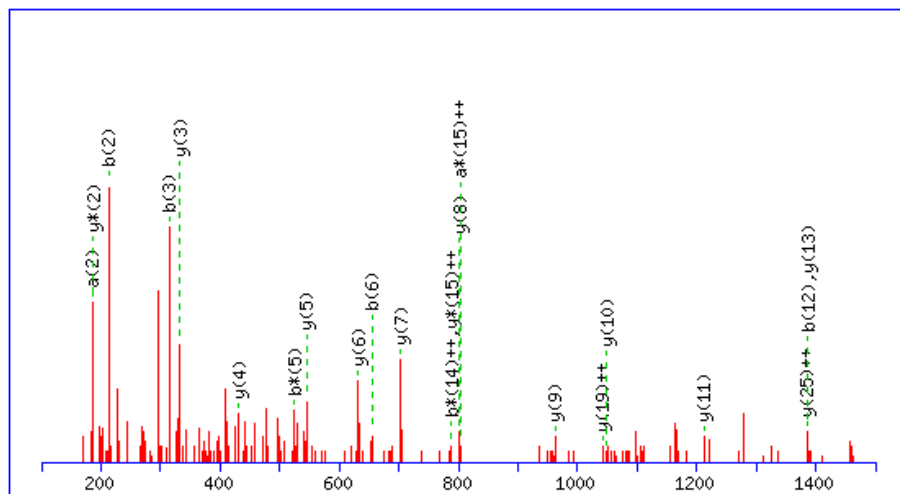


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	72.0808	36.5440			100.0757	50.5415			V					27
2	185.1648	93.0861			213.1598	107.0835			L	2881.3671	1441.1872	2864.3405	1432.6739	26
3	286.2125	143.6099			314.2074	157.6074			T	2768.2830	1384.6452	2751.2565	1376.1319	25
4	399.2966	200.1519			427.2915	214.1494			L	2667.2354	1334.1213	2650.2088	1325.6080	24
5	513.3395	257.1734	496.3130	248.6601	541.3344	271.1709	524.3079	262.6576	N	2554.1513	1277.5793	2537.1247	1269.0660	23
6	626.4236	313.7154	609.3970	305.2022	654.4185	327.7129	637.3919	319.1996	L	2440.1084	1220.5578	2423.0818	1212.0445	22
7	741.4505	371.2289	724.4240	362.7156	769.4454	385.2264	752.4189	376.7131	D	2327.0243	1164.0158	2309.9977	1155.5025	21
8	869.5091	435.2582	852.4825	426.7449	897.5040	449.2556	880.4775	440.7424	Q	2211.9974	1106.5023	2194.9708	1097.9890	20
9	968.5775	484.7924	951.5510	476.2791	996.5724	498.7898	979.5459	490.2766	V	2083.9388	1042.4730	2066.9122	1033.9598	19
10	1083.6045	542.3059	1066.5779	533.7926	1111.5994	556.3033	1094.5728	547.7900	D	1984.8704	992.9388	1967.8438	984.4255	18
11	1230.6729	615.8401	1213.6463	607.3268	1258.6678	629.8375	1241.6412	621.3243	F	1869.8434	935.4253	1852.8169	926.9121	17
12	1358.7314	679.8694	1341.7049	671.3561	1386.7264	693.8668	1369.6998	685.3535	Q	1722.7750	861.8911	1705.7485	853.3779	16
13	1495.7904	748.3988	1478.7638	739.8855	1523.7853	762.3963	1506.7587	753.8830	H	1594.7164	797.8619	1577.6899	789.3486	15
14	1566.8275	783.9174	1549.8009	775.4041	1594.8224	797.9148	1577.7958	789.4016	A	1457.6575	729.3324	1440.6310	720.8191	14
15	1623.8489	812.4281	1606.8224	803.9148	1651.8438	826.4256	1634.8173	817.9123	G	1386.6204	693.8138	1369.5939	685.3006	13
16	1740.8801	870.9437	1723.8536	862.4304	1768.8750	884.9412	1751.8485	876.4279	N	1329.5989	665.3031	1312.5724	656.7898	12
17	1903.9435	952.4754	1886.9169	943.9621	1931.9384	966.4728	1914.9118	957.9595	Y	1212.5677	606.7875	1195.5412	598.2742	11
18	1990.9755	995.9914	1973.9489	987.4781	2018.9704	1009.9888	2001.9438	1001.4756	S	1049.5044	525.2558	1032.4779	516.7426	10
19	2151.0061	1076.0067	2133.9796	1067.4934	2179.0010	1090.0042	2161.9745	1081.4909	C	962.4724	481.7398	945.4458	473.2266	9
20	2250.0745	1125.5409	2233.0480	1117.0276	2278.0695	1139.5384	2261.0429	1131.0251	V	802.4417	401.7245	785.4152	393.2112	8
21	2321.1117	1161.0595	2304.0851	1152.5462	2349.1066	1175.0569	2332.0800	1166.5436	A	703.3733	352.1903	686.3468	343.6770	7
22	2408.1437	1204.5755	2391.1171	1196.0622	2436.1386	1218.5729	2419.1120	1210.0597	S	632.3362	316.6717	615.3097	308.1585	6
23	2522.1866	1261.5969	2505.1601	1253.0837	2550.1815	1275.5944	2533.1550	1267.0811	N	545.3042	273.1557	528.2776	264.6425	5
24	2621.2550	1311.1311	2604.2285	1302.6179	2649.2499	1325.1286	2632.2234	1316.6153	V	431.2613	216.1343	414.2347	207.6210	4
25	2749.3136	1375.1604	2732.2871	1366.6472	2777.3085	1389.1579	2760.2820	1380.6446	Q	332.1928	166.6001	315.1663	158.0868	3
26	2806.3351	1403.6712	2789.3085	1395.1579	2834.3300	1417.6686	2817.3034	1409.1554	G	204.1343	102.5708	187.1077	94.0575	2
27									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of VLTLNLDQVDFQHAGNYSCVASNVQGK

Found in gi|27262659 in Ref_human, macrophage colony-stimulating factor 1 receptor precursor [Homo sapiens]

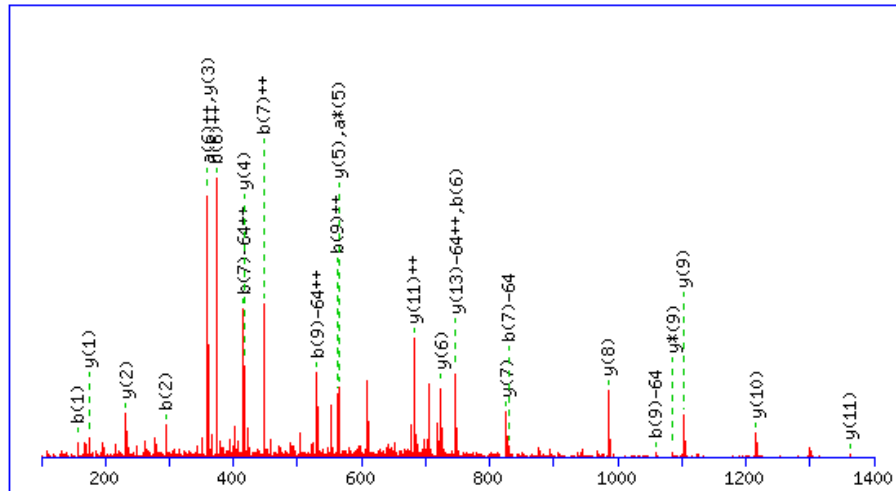
Sample: HCC patient serum AAL(+)



MS/MS Fragmentation of RHEEGHMLNCTCFGQGR

Found in gi|16933542 in Ref_human, fibronectin isoform 3 preproprotein [Homo sapiens]

Sample: HepG2 medium AAL(+)

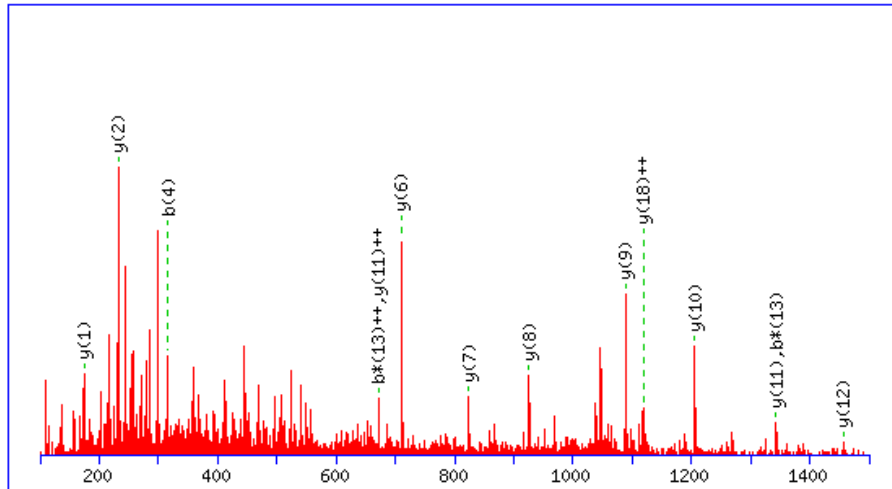


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	129.1135	65.0604	112.0869	56.5471	157.1084	79.0578	140.0818	70.5446	R					17
2	266.1724	133.5898	249.1458	125.0766	294.1673	147.5873	277.1408	139.0740	H	1951.7730	976.3901	1934.7464	967.8769	16
3	395.2150	198.1111	378.1884	189.5979	423.2099	212.1086	406.1833	203.5953	E	1814.7141	907.8607	1797.6875	899.3474	15
4	524.2576	262.6324	507.2310	254.1191	552.2525	276.6299	535.2259	268.1166	E	1685.6715	843.3394	1668.6449	834.8261	14
5	581.2790	291.1432	564.2525	282.6299	609.2739	305.1406	592.2474	296.6273	G	1556.6289	778.8181	1539.6023	770.3048	13
6	718.3379	359.6726	701.3114	351.1593	746.3329	373.6701	729.3063	365.1568	H	1499.6074	750.3073	1482.5809	741.7941	12
7	865.3733	433.1903	848.3468	424.6770	893.3683	447.1878	876.3417	438.6745	M	1362.5485	681.7779	1345.5220	673.2646	11
8	978.4574	489.7323	961.4309	481.2191	1006.4523	503.7298	989.4258	495.2165	L	1215.5131	608.2602	1198.4866	599.7469	10
9	1095.4886	548.2479	1078.4620	539.7347	1123.4835	562.2454	1106.4570	553.7321	N	1102.4290	551.7182	1085.4025	543.2049	9
10	1255.5192	628.2633	1238.4927	619.7500	1283.5142	642.2607	1266.4876	633.7474	C	985.3978	493.2026	968.3713	484.6893	8
11	1356.5669	678.7871	1339.5404	670.2738	1384.5618	692.7846	1367.5353	684.2713	T	825.3672	413.1872	808.3407	404.6740	7
12	1516.5976	758.8024	1499.5710	750.2892	1544.5925	772.7999	1527.5659	764.2866	C	724.3195	362.6634	707.2930	354.1501	6
13	1663.6660	832.3366	1646.6394	823.8234	1691.6609	846.3341	1674.6344	837.8208	F	564.2889	282.6481	547.2623	274.1348	5
14	1720.6875	860.8474	1703.6609	852.3341	1748.6824	874.8448	1731.6558	866.3315	G	417.2205	209.1139	400.1939	200.6006	4
15	1848.7460	924.8767	1831.7195	916.3634	1876.7409	938.8741	1859.7144	930.3608	G	360.1990	180.6031	343.1724	172.0899	3
16	1905.7675	953.3874	1888.7409	944.8741	1933.7624	967.3848	1916.7359	958.8716	G	232.1404	116.5738	215.1139	108.0606	2
17									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of GGNSNGALCHFPFLYNNHNYTDCTSEGR

Found in gi|16933542 in Ref_human, fibronectin isoform 3 preproprotein [Homo sapiens]

Sample: HuH-7 medium AAL(+)

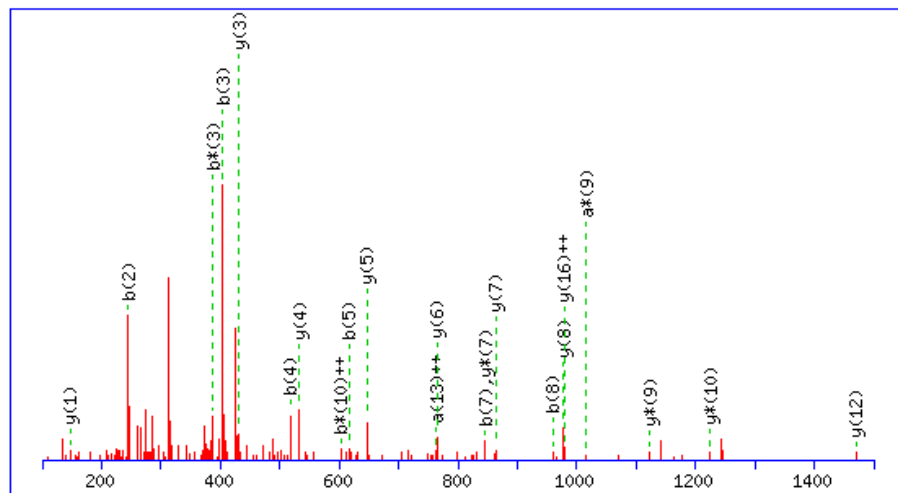


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	30.0338	15.5206			58.0287	29.5180			G					28
2	87.0553	44.0313			115.0502	58.0287			G	3148.3158	1574.6615	3131.2893	1566.1483	27
3	201.0982	101.0527	184.0717	92.5395	229.0931	115.0502	212.0666	106.5369	N	3091.2943	1546.1508	3074.2678	1537.6375	26
4	288.1302	144.5688	271.1037	136.0555	316.1252	158.5662	299.0986	150.0529	S	2977.2514	1489.1293	2960.2249	1480.6161	25
5	402.1732	201.5902	385.1466	193.0769	430.1681	215.5877	413.1415	207.0744	N	2890.2194	1445.6133	2873.1928	1437.1001	24
6	459.1946	230.1010	442.1681	221.5877	487.1896	244.0984	470.1630	235.5851	G	2776.1765	1388.5919	2759.1499	1380.0786	23
7	530.2317	265.6195	513.2052	257.1062	558.2267	279.6170	541.2001	271.1037	A	2719.1550	1360.0811	2702.1284	1351.5679	22
8	643.3158	322.1615	626.2893	313.6483	671.3107	336.1590	654.2842	327.6457	L	2648.1179	1324.5626	2631.0913	1316.0493	21
9	803.3465	402.1769	786.3199	393.6636	831.3414	416.1743	814.3148	407.6611	C	2535.0338	1268.0205	2518.0073	1259.5073	20
10	940.4054	470.7063	923.3788	462.1931	968.4003	484.7038	951.3737	476.1905	H	2375.0032	1188.0052	2357.9766	1179.4919	19
11	1087.4738	544.2405	1070.4472	535.7273	1115.4687	558.2380	1098.4422	549.7247	F	2237.9443	1119.4758	2220.9177	1110.9625	18
12	1184.5266	592.7669	1167.5000	584.2536	1212.5215	606.7644	1195.4949	598.2511	P	2090.8758	1045.9416	2073.8493	1037.4283	17
13	1331.5950	666.3011	1314.5684	657.7878	1359.5899	680.2986	1342.5633	671.7853	F	1993.8231	997.4152	1976.7965	988.9019	16
14	1444.6790	722.8432	1427.6525	714.3299	1472.6739	736.8406	1455.6474	728.3273	L	1846.7547	923.8810	1829.7281	915.3677	15
15	1607.7424	804.3748	1590.7158	795.8615	1635.7373	818.3723	1618.7107	809.8590	Y	1733.6706	867.3389	1716.6440	858.8257	14
16	1721.7853	861.3963	1704.7587	852.8830	1749.7802	875.3937	1732.7537	866.8805	N	1570.6073	785.8073	1553.5807	777.2940	13
17	1835.8282	918.4177	1818.8017	909.9045	1863.8231	932.4152	1846.7966	923.9019	N	1456.5643	728.7858	1439.5378	720.2725	12
18	1972.8871	986.9472	1955.8606	978.4339	2000.8820	1000.9447	1983.8555	992.4314	H	1342.5214	671.7643	1325.4949	663.2511	11
19	2089.9183	1045.4628	2072.8918	1036.9495	2117.9132	1059.4603	2100.8867	1050.9470	N	1205.4625	603.2349	1188.4360	594.7216	10
20	2252.9816	1126.9945	2235.9551	1118.4812	2280.9766	1140.9919	2263.9500	1132.4786	Y	1088.4313	544.7193	1071.4048	536.2060	9
21	2354.0293	1177.5183	2337.0028	1169.0050	2382.0242	1191.5158	2364.9977	1183.0025	T	925.3680	463.1876	908.3414	454.6744	8
22	2469.0563	1235.0318	2452.0297	1226.5185	2497.0512	1249.0292	2480.0246	1240.5160	D	824.3203	412.6638	807.2938	404.1505	7
23	2629.0869	1315.0471	2612.0604	1306.5338	2657.0818	1329.0446	2640.0553	1320.5313	C	709.2934	355.1503	692.2668	346.6370	6
24	2730.1346	1365.5709	2713.1080	1357.0577	2758.1295	1379.5684	2741.1030	1371.0551	T	549.2627	275.1350	532.2362	266.6217	5
25	2817.1666	1409.0869	2800.1401	1400.5737	2845.1615	1423.0844	2828.1350	1414.5711	S	448.2150	224.6112	431.1885	216.0979	4
26	2946.2092	1473.6082	2929.1827	1465.0950	2974.2041	1487.6057	2957.1776	1479.0924	E	361.1830	181.0951	344.1565	172.5819	3
27	3003.2307	1502.1190	2986.2041	1493.6057	3031.2256	1516.1164	3014.1990	1507.6032	G	232.1404	116.5738	215.1139	108.0606	2
28									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of DQCIVDDITYNVNDTFHK

Found in gi|16933542 in Ref_human, fibronectin isoform 3 preproprotein [Homo sapiens]

Sample: HCC patient serum AAL(+)



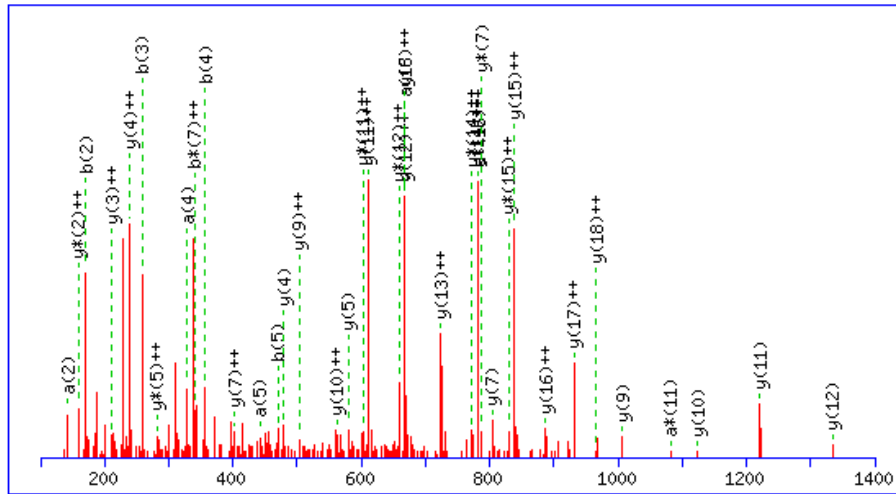
#	a	a ⁺⁺	a [*]	a ⁺⁺	b	b ⁺⁺	b [*]	b ⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ⁺⁺	#
1	88.0393	44.5233			116.0342	58.5207			D					18
2	216.0979	108.5526	199.0713	100.0393	244.0928	122.5500	227.0662	114.0368	Q	2084.9479	1042.9776	2067.9214	1034.4643	17
3	376.1285	188.5679	359.1020	180.0546	404.1234	202.5654	387.0969	194.0521	C	1956.8894	978.9483	1939.8628	970.4350	16
4	489.2126	245.1099	472.1860	236.5967	517.2075	259.1074	500.1810	250.5941	I	1796.8587	898.9330	1779.8322	890.4197	15
5	588.2810	294.6441	571.2545	286.1309	616.2759	308.6416	599.2494	300.1283	V	1683.7747	842.3910	1666.7481	833.8777	14
6	703.3080	352.1576	686.2814	343.6443	731.3029	366.1551	714.2763	357.6418	D	1584.7062	792.8568	1567.6797	784.3435	13
7	818.3349	409.6711	801.3083	401.1578	846.3298	423.6685	829.3033	415.1553	D	1469.6793	735.3433	1452.6527	726.8300	12
8	931.4190	466.2131	914.3924	457.6998	959.4139	480.2106	942.3873	471.6973	I	1354.6524	677.8298	1337.6258	669.3165	11
9	1032.4666	516.7370	1015.4401	508.2237	1060.4616	530.7344	1043.4350	522.2211	T	1241.5683	621.2878	1224.5417	612.7745	10
10	1195.5300	598.2686	1178.5034	589.7553	1223.5249	612.2661	1206.4983	603.7528	Y	1140.5206	570.7639	1123.4941	562.2507	9
11	1309.5729	655.2901	1292.5463	646.7768	1337.5678	669.2875	1320.5413	660.7743	N	977.4573	489.2323	960.4307	480.7190	8
12	1408.6413	704.8243	1391.6148	696.3110	1436.6362	718.8217	1419.6097	710.3085	V	863.4144	432.2108	846.3878	423.6975	7
13	1525.6725	763.3399	1508.6459	754.8266	1553.6674	777.3373	1536.6409	768.8241	N	764.3459	382.6766	747.3194	374.1633	6
14	1640.6994	820.8534	1623.6729	812.3401	1668.6944	834.8508	1651.6678	826.3375	D	647.3148	324.1610	630.2882	315.6477	5
15	1741.7471	871.3772	1724.7206	862.8639	1769.7420	885.3747	1752.7155	876.8614	T	532.2878	266.6475	515.2613	258.1343	4
16	1888.8155	944.9114	1871.7890	936.3981	1916.8104	958.9089	1899.7839	950.3956	F	431.2401	216.1237	414.2136	207.6104	3
17	2025.8744	1013.4409	2008.8479	1004.9276	2053.8694	1027.4383	2036.8428	1018.9250	H	284.1717	142.5895	267.1452	134.0762	2
18									K	147.1128	74.0600	130.0863	65.5468	1

LAMP2

MS/MS Fragmentation of VASVININPNTTHSTGSCR

Found in gi|4504957 in Ref_human, lysosome-associated membrane glycoprotein 2 isoform A precursor
[Homo sapiens]

Sample: HCC patient serum AAL(+)

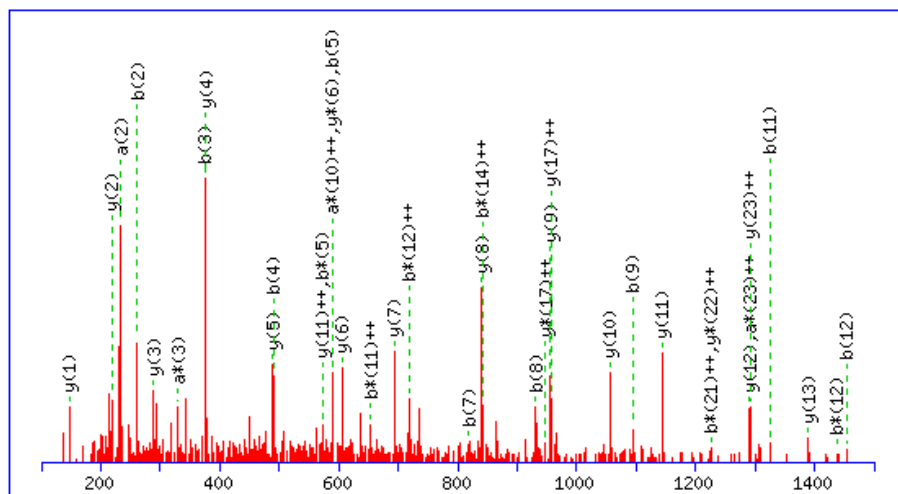


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	72.0808	36.5440			100.0757	50.5415			V					19
2	143.1179	72.0626			171.1128	86.0600			A	1931.9126	966.4599	1914.8860	957.9466	18
3	230.1499	115.5786			258.1448	129.5761			S	1860.8754	930.9414	1843.8489	922.4281	17
4	329.2183	165.1128			357.2132	179.1103			V	1773.8434	887.4253	1756.8169	878.9121	16
5	442.3024	221.6548			470.2973	235.6523			I	1674.7750	837.8911	1657.7485	829.3779	15
6	556.3453	278.6763	539.3188	270.1630	584.3402	292.6738	567.3137	284.1605	N	1561.6909	781.3491	1544.6644	772.8358	14
7	669.4294	335.2183	652.4028	326.7051	697.4243	349.2158	680.3978	340.7025	I	1447.6480	724.3276	1430.6215	715.8144	13
8	783.4723	392.2398	766.4458	383.7265	811.4672	406.2373	794.4407	397.7240	N	1334.5639	667.7856	1317.5374	659.2723	12
9	880.5251	440.7662	863.4985	432.2529	908.5200	454.7636	891.4934	446.2504	P	1220.5210	610.7641	1203.4945	602.2509	11
10	997.5563	499.2818	980.5297	490.7685	1025.5512	513.2792	1008.5246	504.7660	N	1123.4683	562.2378	1106.4417	553.7245	10
11	1098.6039	549.8056	1081.5774	541.2923	1126.5989	563.8031	1109.5723	555.2898	T	1006.4371	503.7222	989.4105	495.2089	9
12	1199.6516	600.3294	1182.6251	591.8162	1227.6465	614.3269	1210.6200	605.8136	T	905.3894	453.1983	888.3628	444.6851	8
13	1336.7105	668.8589	1319.6840	660.3456	1364.7055	682.8564	1347.6789	674.3431	H	804.3417	402.6745	787.3152	394.1612	7
14	1423.7426	712.3749	1406.7160	703.8616	1451.7375	726.3724	1434.7109	717.8591	S	667.2828	334.1450	650.2563	325.6318	6
15	1524.7902	762.8988	1507.7637	754.3855	1552.7852	776.8962	1535.7586	768.3829	T	580.2508	290.6290	563.2242	282.1157	5
16	1581.8117	791.4095	1564.7852	782.8962	1609.8066	805.4069	1592.7801	796.8937	G	479.2031	240.1052	462.1765	231.5919	4
17	1668.8437	834.9255	1651.8172	826.4122	1696.8386	848.9230	1679.8121	840.4097	S	422.1816	211.5945	405.1551	203.0812	3
18	1828.8744	914.9408	1811.8478	906.4276	1856.8693	928.9383	1839.8427	920.4250	C	335.1496	168.0784	318.1231	159.5652	2
19									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of FLNDVKTLYETEVFSTDFSNISSAAK

Found in gi|205277441 in Ref_human, thyroxine-binding globulin precursor [Homo sapiens]

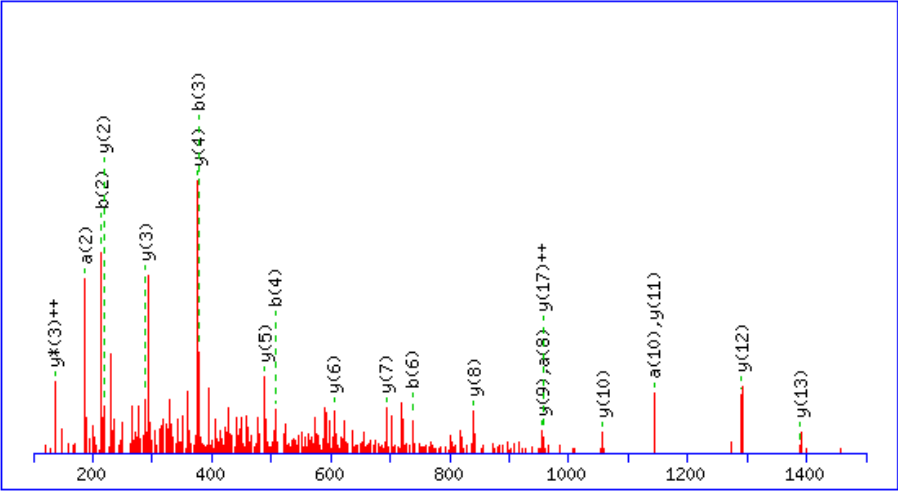
Sample: HCC patient serum AAL(+)



#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	120.0808	60.5440			148.0757	74.5415			F					25
2	233.1648	117.0861			261.1598	131.0835			L	2695.3235	1348.1654	2678.2969	1339.6521	24
3	347.2078	174.1075	330.1812	165.5942	375.2027	188.1050	358.1761	179.5917	N	2582.2394	1291.6233	2565.2129	1283.1101	23
4	462.2347	231.6210	445.2082	223.1077	490.2296	245.6185	473.2031	237.1052	D	2468.1965	1234.6019	2451.1699	1226.0886	22
5	561.3031	281.1552	544.2766	272.6419	589.2980	295.1527	572.2715	286.6394	V	2353.1695	1177.0884	2336.1430	1168.5751	21
6	689.3981	345.2027	672.3715	336.6894	717.3930	359.2001	700.3665	350.6869	K	2254.1011	1127.5542	2237.0746	1119.0409	20
7	790.4458	395.7265	773.4192	387.2132	818.4407	409.7240	801.4141	401.2107	T	2126.0062	1063.5067	2108.9796	1054.9934	19
8	903.5298	452.2686	886.5033	443.7553	931.5247	466.2660	914.4982	457.7527	L	2024.9585	1012.9829	2007.9319	1004.4696	18
9	1066.5932	533.8002	1049.5666	525.2869	1094.5881	547.7977	1077.5615	539.2844	Y	1911.8744	956.4409	1894.8479	947.9276	17
10	1195.6358	598.3215	1178.6092	589.8082	1223.6307	612.3190	1206.6041	603.8057	E	1748.8111	874.9092	1731.7845	866.3959	16
11	1296.6834	648.8454	1279.6569	640.3321	1324.6783	662.8428	1307.6518	654.3295	T	1619.7685	810.3879	1602.7420	801.8746	15
12	1425.7260	713.3666	1408.6995	704.8534	1453.7209	727.3641	1436.6944	718.8508	E	1518.7208	759.8641	1501.6943	751.3508	14
13	1524.7944	762.9009	1507.7679	754.3876	1552.7894	776.8983	1535.7628	768.3850	V	1389.6782	695.3428	1372.6517	686.8295	13
14	1671.8629	836.4351	1654.8363	827.9218	1699.8578	850.4325	1682.8312	841.9192	F	1290.6098	645.8085	1273.5833	637.2953	12
15	1758.8949	879.9511	1741.8683	871.4378	1786.8898	893.9485	1769.8632	885.4353	S	1143.5414	572.2743	1126.5149	563.7611	11
16	1859.9426	930.4749	1842.9160	921.9616	1887.9375	944.4724	1870.9109	935.9591	T	1056.5094	528.7583	1039.4828	520.2451	10
17	1974.9695	987.9884	1957.9430	979.4751	2002.9644	1001.9858	1985.9379	993.4726	D	955.4617	478.2345	938.4351	469.7212	9
18	2122.0379	1061.5226	2105.0114	1053.0093	2150.0328	1075.5201	2133.0063	1067.0068	F	840.4348	420.7210	823.4082	412.2077	8
19	2209.0699	1105.0386	2192.0434	1096.5253	2237.0649	1119.0361	2220.0383	1110.5228	S	693.3663	347.1868	676.3398	338.6735	7
20	2326.1011	1163.5542	2309.0746	1155.0409	2354.0960	1177.5517	2337.0695	1169.0384	N	606.3343	303.6708	589.3078	295.1575	6
21	2439.1852	1220.0962	2422.1586	1211.5830	2467.1801	1234.0937	2450.1536	1225.5804	I	489.3031	245.1552	472.2766	236.6419	5
22	2526.2172	1263.6122	2509.1907	1255.0990	2554.2121	1277.6097	2537.1856	1269.0964	S	376.2191	188.6132	359.1925	180.0999	4
23	2597.2543	1299.1308	2580.2278	1290.6175	2625.2493	1313.1283	2608.2227	1304.6150	A	289.1870	145.0972	272.1605	136.5839	3
24	2668.2915	1334.6494	2651.2649	1326.1361	2696.2864	1348.6468	2679.2598	1340.1335	A	218.1499	109.5786	201.1234	101.0653	2
25									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of TLYETEVFSTDFSNISAAK
 Found in gi|205277441 in Ref_human, thyroxine-binding globulin precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

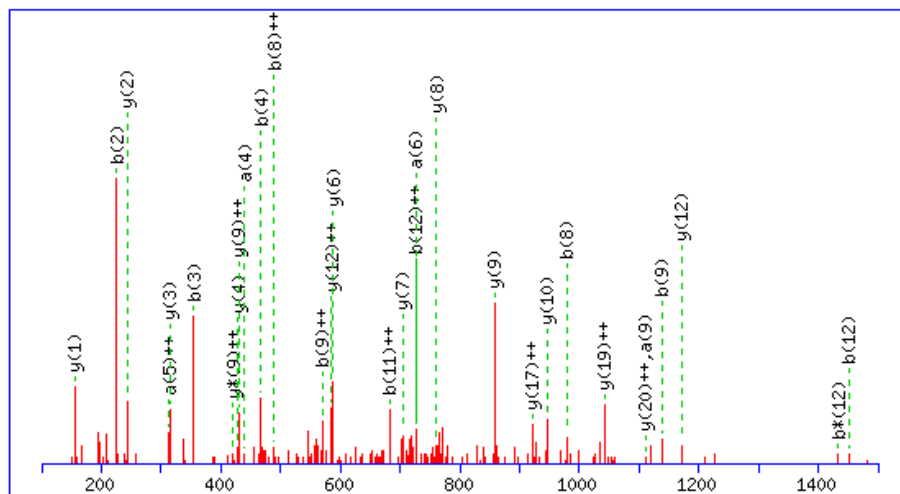


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	74.0600	37.5337			102.0550	51.5311			T					19
2	187.1441	94.0757			215.1390	108.0731			L	2024.9585	1012.9829	2007.9319	1004.4696	18
3	350.2074	175.6074			378.2023	189.6048			Y	1911.8744	956.4409	1894.8479	947.9276	17
4	479.2500	240.1287			507.2449	254.1261			E	1748.8111	874.9092	1731.7845	866.3959	16
5	580.2977	290.6525			608.2926	304.6499			T	1619.7685	810.3879	1602.7420	801.8746	15
6	709.3403	355.1738			737.3352	369.1712			E	1518.7208	759.8641	1501.6943	751.3508	14
7	808.4087	404.7080			836.4036	418.7055			V	1389.6782	695.3428	1372.6517	686.8295	13
8	955.4771	478.2422			983.4720	492.2397			F	1290.6098	645.8085	1273.5833	637.2953	12
9	1042.5092	521.7582			1070.5041	535.7557			S	1143.5414	572.2743	1126.5149	563.7611	11
10	1143.5568	572.2821			1171.5517	586.2795			T	1056.5094	528.7583	1039.4828	520.2451	10
11	1258.5838	629.7955			1286.5787	643.7930			D	955.4617	478.2345	938.4351	469.7212	9
12	1405.6522	703.3297			1433.6471	717.3272			F	840.4348	420.7210	823.4082	412.2077	8
13	1492.6842	746.8457			1520.6791	760.8432			S	693.3663	347.1868	676.3398	338.6735	7
14	1609.7154	805.3613	1592.6889	796.8481	1637.7103	819.3588	1620.6838	810.8455	N	606.3343	303.6708	589.3078	295.1575	6
15	1722.7995	861.9034	1705.7729	853.3901	1750.7944	875.9008	1733.7678	867.3876	I	489.3031	245.1552	472.2766	236.6419	5
16	1809.8315	905.4194	1792.8049	896.9061	1837.8264	919.4168	1820.7999	910.9036	S	376.2191	188.6132	359.1925	180.0999	4
17	1880.8686	940.9379	1863.8421	932.4247	1908.8635	954.9354	1891.8370	946.4221	A	289.1870	145.0972	272.1605	136.5839	3
18	1951.9057	976.4565	1934.8792	967.9432	1979.9006	990.4540	1962.8741	981.9407	A	218.1499	109.5786	201.1234	101.0653	2
19									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of SHEIWITHSCPQSPGNGTDASH

Found in gi|7382460 in Ref_human, sex hormone-binding globulin isoform 1 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

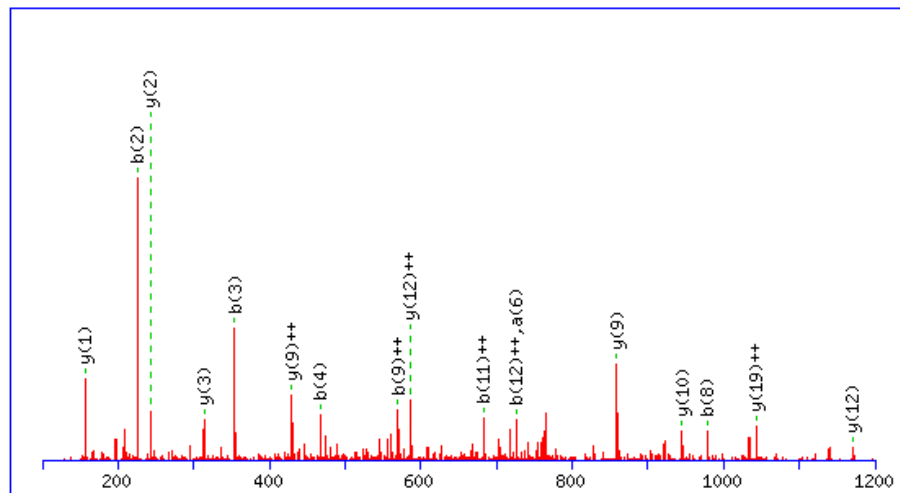


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	60.0444	30.5258			88.0393	44.5233			S					21
2	197.1033	99.0553			225.0982	113.0527			H	2220.9249	1110.9661	2203.8984	1102.4528	20
3	326.1459	163.5766			354.1408	177.5740			E	2083.8660	1042.4366	2066.8395	1033.9234	19
4	439.2300	220.1186			467.2249	234.1161			I	1954.8234	977.9153	1937.7969	969.4021	18
5	625.3093	313.1583			653.3042	327.1557			W	1841.7393	921.3733	1824.7128	912.8600	17
6	726.3570	363.6821			754.3519	377.6796			T	1655.6600	828.3337	1638.6335	819.8204	16
7	863.4159	432.2116			891.4108	446.2090			H	1554.6124	777.8098	1537.5858	769.2965	15
8	950.4479	475.7276			978.4428	489.7250			S	1417.5534	709.2804	1400.5269	700.7671	14
9	1110.4785	555.7429			1138.4735	569.7404			C	1330.5214	665.7643	1313.4949	657.2511	13
10	1207.5313	604.2693			1235.5262	618.2667			P	1170.4908	585.7490	1153.4642	577.2357	12
11	1335.5899	668.2986	1318.5633	659.7853	1363.5848	682.2960	1346.5582	673.7828	Q	1073.4380	537.2226	1056.4115	528.7094	11
12	1422.6219	711.8146	1405.5954	703.3013	1450.6168	725.8121	1433.5903	717.2988	S	945.3794	473.1934	928.3529	464.6801	10
13	1519.6747	760.3410	1502.6481	751.8277	1547.6696	774.3384	1530.6430	765.8252	P	858.3474	429.6773	841.3208	421.1641	9
14	1576.6961	788.8517	1559.6696	780.3384	1604.6911	802.8492	1587.6645	794.3359	G	761.2946	381.1510	744.2681	372.6377	8
15	1693.7273	847.3673	1676.7008	838.8540	1721.7222	861.3648	1704.6957	852.8515	N	704.2732	352.6402	687.2466	344.1269	7
16	1750.7488	875.8780	1733.7222	867.3648	1778.7437	889.8755	1761.7172	881.3622	G	587.2420	294.1246			6
17	1851.7965	926.4019	1834.7699	917.8886	1879.7914	940.3993	1862.7648	931.8861	T	530.2205	265.6139			5
18	1966.8234	983.9153	1949.7969	975.4021	1994.8183	997.9128	1977.7918	989.3995	D	429.1728	215.0901			4
19	2037.8605	1019.4339	2020.8340	1010.9206	2065.8554	1033.4314	2048.8289	1024.9181	A	314.1459	157.5766			3
20	2124.8926	1062.9499	2107.8660	1054.4366	2152.8875	1076.9474	2135.8609	1068.4341	S	243.1088	122.0580			2
21									H	156.0768	78.5420			1

MS/MS Fragmentation of SHEIWITHSCPQSPGNGTDASH

Found in gi|7382460 in Ref_human, sex hormone-binding globulin isoform 1 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)



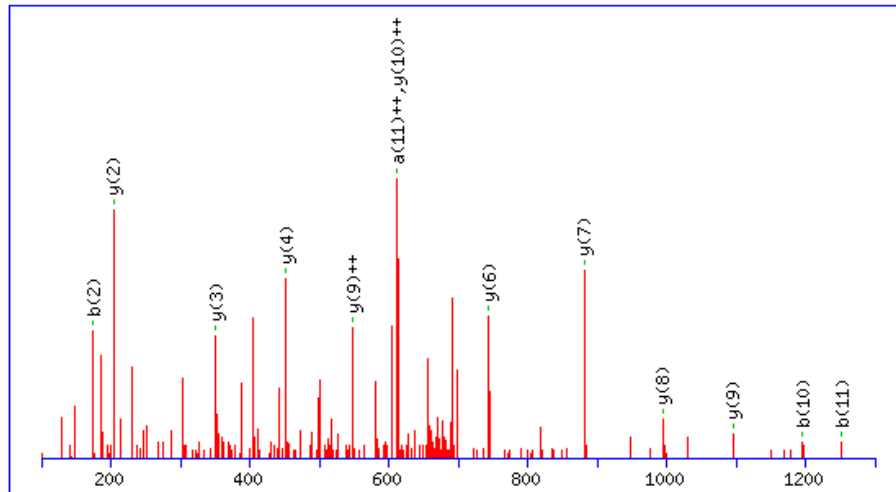
#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	60.0444	30.5258			88.0393	44.5233			S					21
2	197.1033	99.0553			225.0982	113.0527			H	2220.9249	1110.9661	2203.8984	1102.4528	20
3	326.1459	163.5766			354.1408	177.5740			E	2083.8660	1042.4366	2066.8395	1033.9234	19
4	439.2300	220.1186			467.2249	234.1161			I	1954.8234	977.9153	1937.7969	969.4021	18
5	625.3093	313.1583			653.3042	327.1557			W	1841.7393	921.3733	1824.7128	912.8600	17
6	726.3570	363.6821			754.3519	377.6796			T	1655.6600	828.3337	1638.6335	819.8204	16
7	863.4159	432.2116			891.4108	446.2090			H	1554.6124	777.8098	1537.5858	769.2965	15
8	950.4479	475.7276			978.4428	489.7250			S	1417.5534	709.2804	1400.5269	700.7671	14
9	1110.4785	555.7429			1138.4735	569.7404			C	1330.5214	665.7643	1313.4949	657.2511	13
10	1207.5313	604.2693			1235.5262	618.2667			P	1170.4908	585.7490	1153.4642	577.2357	12
11	1335.5899	668.2986	1318.5633	659.7853	1363.5848	682.2960	1346.5582	673.7828	Q	1073.4380	537.2226	1056.4115	528.7094	11
12	1422.6219	711.8146	1405.5954	703.3013	1450.6168	725.8121	1433.5903	717.2988	S	945.3794	473.1934	928.3529	464.6801	10
13	1519.6747	760.3410	1502.6481	751.8277	1547.6696	774.3384	1530.6430	765.8252	P	858.3474	429.6773	841.3208	421.1641	9
14	1576.6961	788.8517	1559.6696	780.3384	1604.6911	802.8492	1587.6645	794.3359	G	761.2946	381.1510	744.2681	372.6377	8
15	1693.7273	847.3673	1676.7008	838.8540	1721.7222	861.3648	1704.6957	852.8515	N	704.2732	352.6402	687.2466	344.1269	7
16	1750.7488	875.8780	1733.7222	867.3648	1778.7437	889.8755	1761.7172	881.3622	G	587.2420	294.1246			6
17	1851.7965	926.4019	1834.7699	917.8886	1879.7914	940.3993	1862.7648	931.8861	T	530.2205	265.6139			5
18	1966.8234	983.9153	1949.7969	975.4021	1994.8183	997.9128	1977.7918	989.3995	D	429.1728	215.0901			4
19	2037.8605	1019.4339	2020.8340	1010.9206	2065.8554	1033.4314	2048.8289	1024.9181	A	314.1459	157.5766			3
20	2124.8926	1062.9499	2107.8660	1054.4366	2152.8875	1076.9474	2135.8609	1068.4341	S	243.1088	122.0580			2
21									H	156.0768	78.5420			1

80603LivCaS01-SD+AAL+HIC+IGOT01-140g-step01

MS/MS Fragmentation of GNETLHYETFGK

Found in gi|153082686 in Ref_human, intercellular adhesion molecule 2 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

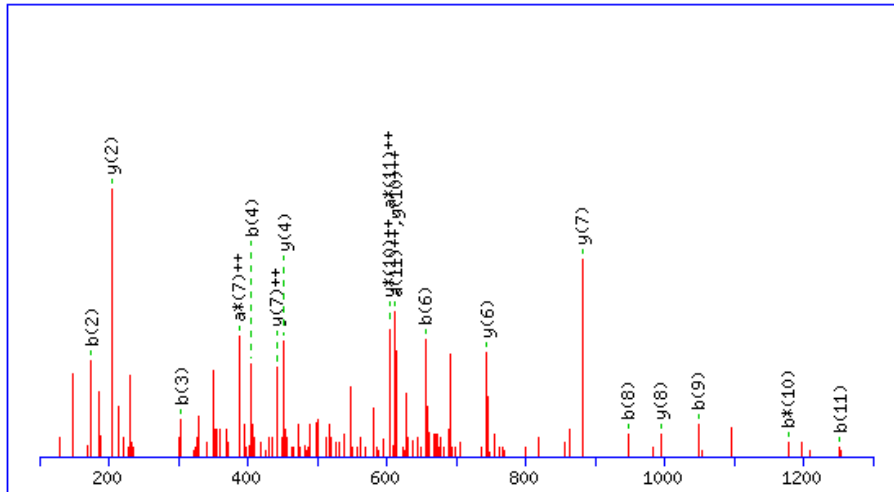


#	a	a ⁺⁺	a [*]	a ⁺⁺⁺	b	b ⁺⁺	b [*]	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ⁺⁺⁺	#
1	30.0338	15.5206			58.0287	29.5180			G					12
2	147.0650	74.0361	130.0385	65.5229	175.0599	88.0336	158.0334	79.5203	N	1341.6207	671.3140	1324.5942	662.8007	11
3	276.1076	138.5574	259.0811	130.0442	304.1025	152.5549	287.0760	144.0416	E	1224.5895	612.7984	1207.5630	604.2851	10
4	377.1553	189.0813	360.1287	180.5680	405.1502	203.0787	388.1237	194.5655	T	1095.5469	548.2771	1078.5204	539.7638	9
5	490.2393	245.6233	473.2128	237.1100	518.2343	259.6208	501.2077	251.1075	L	994.4993	497.7533	977.4727	489.2400	8
6	627.2983	314.1528	610.2717	305.6395	655.2932	328.1502	638.2666	319.6370	H	881.4152	441.2112	864.3886	432.6980	7
7	790.3616	395.6844	773.3350	387.1712	818.3565	409.6819	801.3300	401.1686	Y	744.3563	372.6818	727.3297	364.1685	6
8	919.4042	460.2057	902.3776	451.6925	947.3991	474.2032	930.3725	465.6899	E	581.2930	291.1501	564.2664	282.6368	5
9	1020.4519	510.7296	1003.4253	502.2163	1048.4468	524.7270	1031.4202	516.2138	T	452.2504	226.6288	435.2238	218.1155	4
10	1167.5203	584.2638	1150.4937	575.7505	1195.5152	598.2612	1178.4886	589.7480	F	351.2027	176.1050	334.1761	167.5917	3
11	1224.5417	612.7745	1207.5152	604.2612	1252.5367	626.7720	1235.5101	618.2587	G	204.1343	102.5708	187.1077	94.0575	2
12									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of GNETLHYETFGK

Found in gi|153082686 in Ref_human, intercellular adhesion molecule 2 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

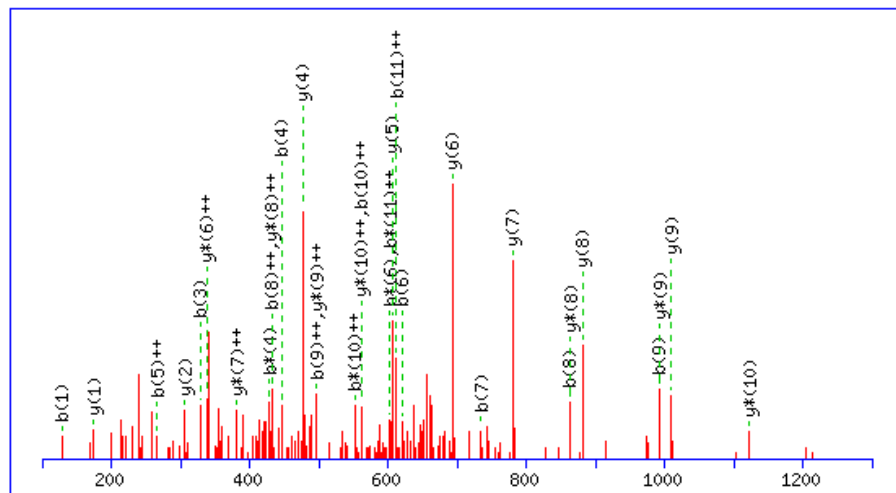


#	a	a ⁺⁺	a [*]	a ⁺⁺	b	b ⁺⁺	b [*]	b ⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ⁺⁺	#
1	30.0338	15.5206			58.0287	29.5180			G					12
2	147.0650	74.0361	130.0385	65.5229	175.0599	88.0336	158.0334	79.5203	N	1341.6207	671.3140	1324.5942	662.8007	11
3	276.1076	138.5574	259.0811	130.0442	304.1025	152.5549	287.0760	144.0416	E	1224.5895	612.7984	1207.5630	604.2851	10
4	377.1553	189.0813	360.1287	180.5680	405.1502	203.0787	388.1237	194.5655	T	1095.5469	548.2771	1078.5204	539.7638	9
5	490.2393	245.6233	473.2128	237.1100	518.2343	259.6208	501.2077	251.1075	L	994.4993	497.7533	977.4727	489.2400	8
6	627.2983	314.1528	610.2717	305.6395	655.2932	328.1502	638.2666	319.6370	H	881.4152	441.2112	864.3886	432.6980	7
7	790.3616	395.6844	773.3350	387.1712	818.3565	409.6819	801.3300	401.1686	Y	744.3563	372.6818	727.3297	364.1685	6
8	919.4042	460.2057	902.3776	451.6925	947.3991	474.2032	930.3725	465.6899	E	581.2930	291.1501	564.2664	282.6368	5
9	1020.4519	510.7296	1003.4253	502.2163	1048.4468	524.7270	1031.4202	516.2138	T	452.2504	226.6288	435.2238	218.1155	4
10	1167.5203	584.2638	1150.4937	575.7505	1195.5152	598.2612	1178.4886	589.7480	F	351.2027	176.1050	334.1761	167.5917	3
11	1224.5417	612.7745	1207.5152	604.2612	1252.5367	626.7720	1235.5101	618.2587	G	204.1343	102.5708	187.1077	94.0575	2
12									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of KAENSSNEEETSSEGNMR

Found in gi|190194423 in Ref_human, SPARC-like protein 1 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

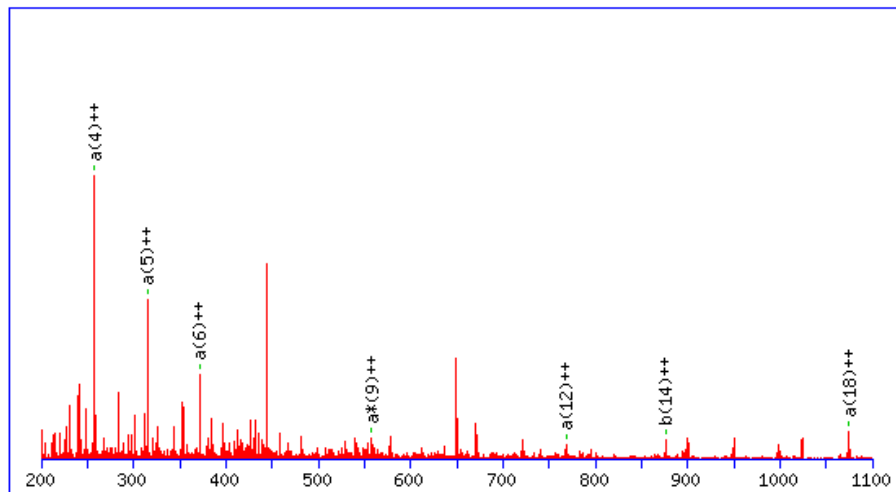


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	101.1073	51.0573	84.0808	42.5440	129.1022	65.0548	112.0757	56.5415	K					18
2	172.1444	86.5759	155.1179	78.0626	200.1394	100.5733	183.1128	92.0600	A	1873.7238	937.3655	1856.6973	928.8523	17
3	301.1870	151.0972	284.1605	142.5839	329.1819	165.0946	312.1554	156.5813	E	1802.6867	901.8470	1785.6601	893.3337	16
4	418.2182	209.6127	401.1917	201.0995	446.2131	223.6102	429.1866	215.0969	N	1673.6441	837.3257	1656.6176	828.8124	15
5	505.2502	253.1288	488.2237	244.6155	533.2452	267.1262	516.2186	258.6129	S	1556.6129	778.8101	1539.5864	770.2968	14
6	592.2823	296.6448	575.2557	288.1315	620.2772	310.6422	603.2506	302.1290	S	1469.5809	735.2941	1452.5543	726.7808	13
7	706.3252	353.6662	689.2987	345.1530	734.3201	367.6637	717.2936	359.1504	N	1382.5489	691.7781	1365.5223	683.2648	12
8	835.3678	418.1875	818.3412	409.6743	863.3627	432.1850	846.3362	423.6717	E	1268.5059	634.7566	1251.4794	626.2433	11
9	964.4104	482.7088	947.3838	474.1956	992.4053	496.7063	975.3788	488.1930	E	1139.4633	570.2353	1122.4368	561.7220	10
10	1093.4530	547.2301	1076.4264	538.7169	1121.4479	561.2276	1104.4213	552.7143	E	1010.4207	505.7140	993.3942	497.2007	9
11	1194.5007	597.7540	1177.4741	589.2407	1222.4956	611.7514	1205.4690	603.2382	T	881.3782	441.1927	864.3516	432.6794	8
12	1281.5327	641.2700	1264.5061	632.7567	1309.5276	655.2674	1292.5011	646.7542	S	780.3305	390.6689	763.3039	382.1556	7
13	1368.5647	684.7860	1351.5382	676.2727	1396.5596	698.7835	1379.5331	690.2702	S	693.2984	347.1529	676.2719	338.6396	6
14	1497.6073	749.3073	1480.5808	740.7940	1525.6022	763.3048	1508.5757	754.7915	E	606.2664	303.6368	589.2399	295.1236	5
15	1554.6288	777.8180	1537.6022	769.3048	1582.6237	791.8155	1565.5971	783.3022	G	477.2238	239.1156	460.1973	230.6023	4
16	1668.6717	834.8395	1651.6452	826.3262	1696.6666	848.8369	1679.6401	840.3237	N	420.2024	210.6048	403.1758	202.0915	3
17	1799.7122	900.3597	1782.6856	891.8465	1827.7071	914.3572	1810.6806	905.8439	M	306.1594	153.5834	289.1329	145.0701	2
18									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of DWLKNILMQLYEANSEHAGYLNEK

Found in gi|190194423 in Ref_human, SPARC-like protein 1 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

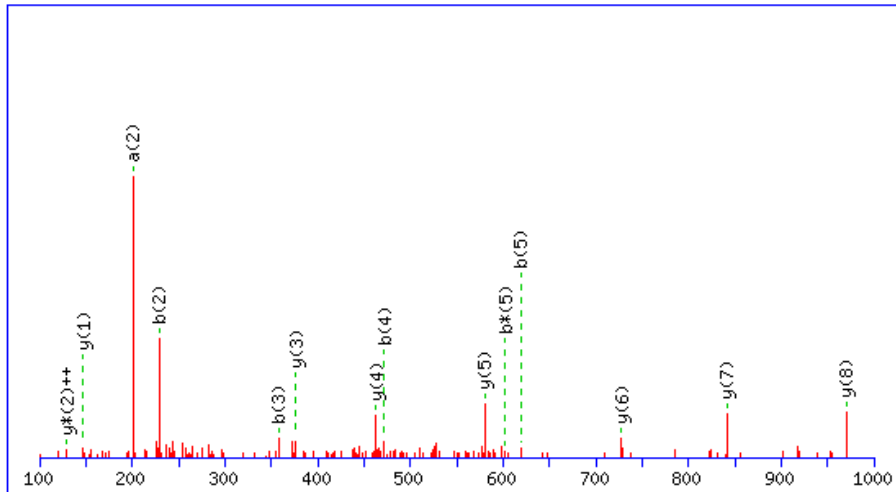


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	88.0393	44.5233			116.0342	58.5207			D					24
2	274.1186	137.5629			302.1135	151.5604			W	2786.3477	1393.6775	2769.3212	1385.1642	23
3	387.2027	194.1050			415.1976	208.1024			L	2600.2684	1300.6379	2583.2419	1292.1246	22
4	515.2976	258.1525	498.2711	249.6392	543.2926	272.1499	526.2660	263.6366	K	2487.1844	1244.0958	2470.1578	1235.5825	21
5	629.3406	315.1739	612.3140	306.6606	657.3355	329.1714	640.3089	320.6581	N	2359.0894	1180.0483	2342.0629	1171.5351	20
6	742.4246	371.7160	725.3981	363.2027	770.4196	385.7134	753.3930	377.2001	I	2245.0465	1123.0269	2228.0199	1114.5136	19
7	855.5087	428.2580	838.4822	419.7447	883.5036	442.2554	866.4771	433.7422	L	2131.9624	1066.4848	2114.9359	1057.9716	18
8	1002.5441	501.7757	985.5176	493.2624	1030.5390	515.7731	1013.5125	507.2599	M	2018.8784	1009.9428	2001.8518	1001.4295	17
9	1130.6027	565.8050	1113.5761	557.2917	1158.5976	579.8024	1141.5710	571.2892	Q	1871.8430	936.4251	1854.8164	927.9118	16
10	1243.6867	622.3470	1226.6602	613.8337	1271.6817	636.3445	1254.6551	627.8312	L	1743.7844	872.3958	1726.7578	863.8826	15
11	1406.7501	703.8787	1389.7235	695.3654	1434.7450	717.8761	1417.7184	709.3629	Y	1630.7003	815.8538	1613.6738	807.3405	14
12	1535.7927	768.4000	1518.7661	759.8867	1563.7876	782.3974	1546.7610	773.8842	E	1467.6370	734.3221	1450.6104	725.8089	13
13	1606.8298	803.9185	1589.8032	795.4053	1634.8247	817.9160	1617.7981	809.4027	A	1338.5944	669.8008	1321.5678	661.2876	12
14	1723.8610	862.4341	1706.8344	853.9208	1751.8559	876.4316	1734.8293	867.9183	N	1267.5573	634.2823	1250.5307	625.7690	11
15	1810.8930	905.9501	1793.8664	897.4369	1838.8879	919.9476	1821.8614	911.4343	S	1150.5261	575.7667	1133.4995	567.2534	10
16	1939.9356	970.4714	1922.9090	961.9582	1967.9305	984.4689	1950.9040	975.9556	E	1063.4941	532.2507	1046.4675	523.7374	9
17	2076.9945	1039.0009	2059.9679	1030.4876	2104.9894	1052.9983	2087.9629	1044.4851	H	934.4515	467.7294	917.4249	459.2161	8
18	2148.0316	1074.5194	2131.0051	1066.0062	2176.0265	1088.5169	2159.0000	1080.0036	A	797.3926	399.1999	780.3660	390.6866	7
19	2205.0531	1103.0302	2188.0265	1094.5169	2233.0480	1117.0276	2216.0214	1108.5144	G	726.3554	363.6814	709.3289	355.1681	6
20	2368.1164	1184.5618	2351.0899	1176.0486	2396.1113	1198.5593	2379.0848	1190.0460	Y	669.3340	335.1706	652.3074	326.6574	5
21	2481.2005	1241.1039	2464.1739	1232.5906	2509.1954	1255.1013	2492.1688	1246.5881	L	506.2706	253.6390	489.2441	245.1257	4
22	2598.2317	1299.6195	2581.2051	1291.1062	2626.2266	1313.6169	2609.2000	1305.1036	N	393.1866	197.0969	376.1600	188.5837	3
23	2727.2742	1364.1408	2710.2477	1355.6275	2755.2692	1378.1382	2738.2426	1369.6249	E	276.1554	138.5813	259.1288	130.0681	2
24									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of DIENFNSTQK

Found in gi|4501987 in Ref_human, afamin precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

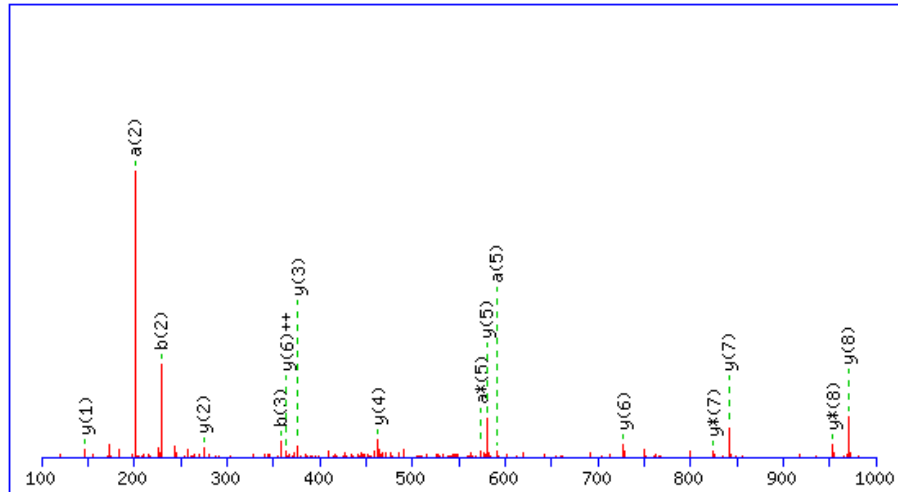


#	a	a ⁺⁺	a [*]	a ⁺⁺⁺	b	b ⁺⁺	b [*]	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ⁺⁺⁺	#
1	88.0393	44.5233			116.0342	58.5207			D					10
2	201.1234	101.0653			229.1183	115.0628			I	1083.5203	542.2638	1066.4937	533.7505	9
3	330.1660	165.5866			358.1609	179.5841			E	970.4362	485.7217	953.4097	477.2085	8
4	444.2089	222.6081	427.1823	214.0948	472.2038	236.6055	455.1773	228.0923	N	841.3936	421.2004	824.3671	412.6872	7
5	591.2773	296.1423	574.2508	287.6290	619.2722	310.1397	602.2457	301.6265	F	727.3507	364.1790	710.3241	355.6657	6
6	708.3085	354.6579	691.2819	346.1446	736.3034	368.6553	719.2769	360.1421	N	580.2823	290.6448	563.2557	282.1315	5
7	795.3405	398.1739	778.3140	389.6606	823.3354	412.1714	806.3089	403.6581	S	463.2511	232.1292	446.2245	223.6159	4
8	896.3882	448.6977	879.3616	440.1845	924.3831	462.6952	907.3566	454.1819	T	376.2191	188.6132	359.1925	180.0999	3
9	1024.4468	512.7270	1007.4202	504.2138	1052.4417	526.7245	1035.4151	518.2112	Q	275.1714	138.0893	258.1448	129.5761	2
10									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of DIENFNSTQK

Found in gi|4501987 in Ref_human, afamin precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)



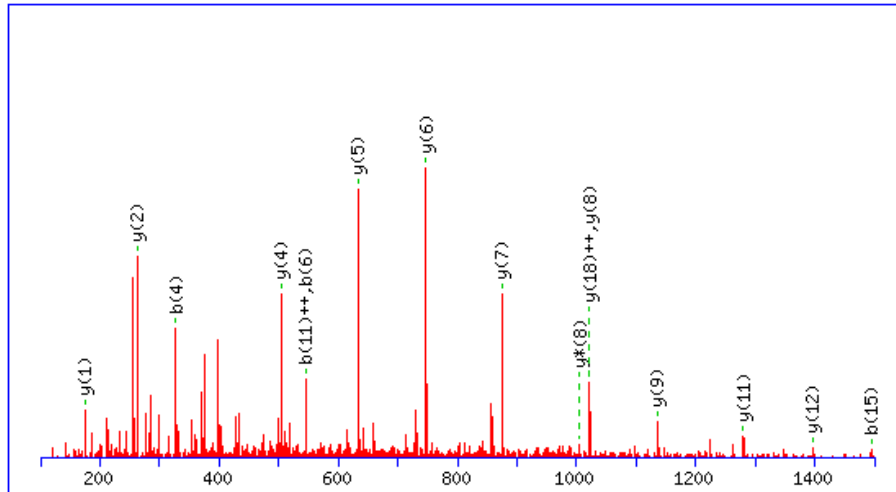
#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	88.0393	44.5233			116.0342	58.5207			D					10
2	201.1234	101.0653			229.1183	115.0628			I	1083.5203	542.2638	1066.4937	533.7505	9
3	330.1660	165.5866			358.1609	179.5841			E	970.4362	485.7217	953.4097	477.2085	8
4	444.2089	222.6081	427.1823	214.0948	472.2038	236.6055	455.1773	228.0923	N	841.3936	421.2004	824.3671	412.6872	7
5	591.2773	296.1423	574.2508	287.6290	619.2722	310.1397	602.2457	301.6265	F	727.3507	364.1790	710.3241	355.6657	6
6	708.3085	354.6579	691.2819	346.1446	736.3034	368.6553	719.2769	360.1421	N	580.2823	290.6448	563.2557	282.1315	5
7	795.3405	398.1739	778.3140	389.6606	823.3354	412.1714	806.3089	403.6581	S	463.2511	232.1292	446.2245	223.6159	4
8	896.3882	448.6977	879.3616	440.1845	924.3831	462.6952	907.3566	454.1819	T	376.2191	188.6132	359.1925	180.0999	3
9	1024.4468	512.7270	1007.4202	504.2138	1052.4417	526.7245	1035.4151	518.2112	Q	275.1714	138.0893	258.1448	129.5761	2
10									K	147.1128	74.0600	130.0863	65.5468	1

AHSG

MS/MS Fragmentation of AALAAFNAQNNGSNFQLEEISR

Found in gi|156523970 in Ref_human, alpha-2-HS-glycoprotein preproprotein [Homo sapiens]

Sample: HCC patient serum AAL(+)

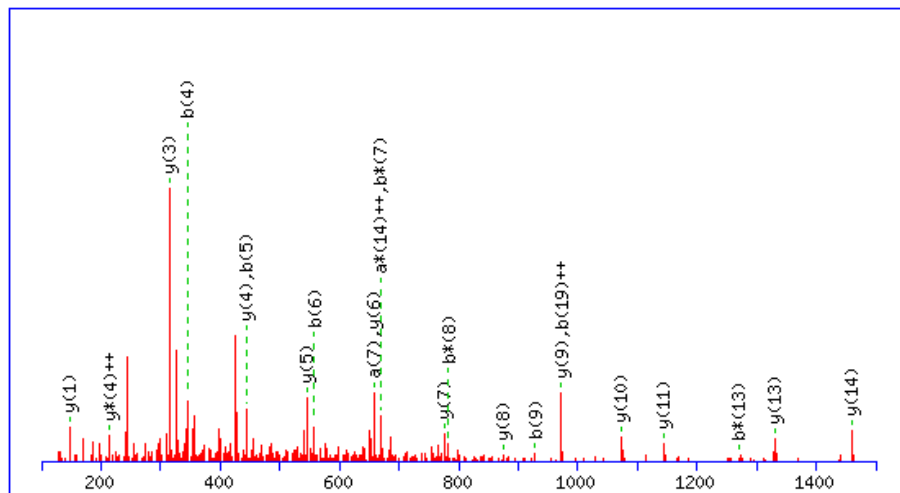


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	44.0495	22.5284			72.0444	36.5258			A					22
2	115.0866	58.0469			143.0815	72.0444			A	2297.1043	1149.0558	2280.0777	1140.5425	21
3	228.1707	114.5890			256.1656	128.5864			L	2226.0671	1113.5372	2209.0406	1105.0239	20
4	299.2078	150.1075			327.2027	164.1050			A	2112.9831	1056.9952	2095.9565	1048.4819	19
5	370.2449	185.6261			398.2398	199.6235			A	2041.9460	1021.4766	2024.9194	1012.9633	18
6	517.3133	259.1603			545.3082	273.1577			F	1970.9089	985.9581	1953.8823	977.4448	17
7	631.3562	316.1817	614.3297	307.6685	659.3511	330.1792	642.3246	321.6659	N	1823.8404	912.4239	1806.8139	903.9106	16
8	702.3933	351.7003	685.3668	343.1870	730.3883	365.6978	713.3617	357.1845	A	1709.7975	855.4024	1692.7710	846.8891	15
9	830.4519	415.7296	813.4254	407.2163	858.4468	429.7271	841.4203	421.2138	Q	1638.7604	819.8838	1621.7338	811.3706	14
10	944.4948	472.7511	927.4683	464.2378	972.4898	486.7485	955.4632	478.2352	N	1510.7018	755.8545	1493.6753	747.3413	13
11	1061.5260	531.2667	1044.4995	522.7534	1089.5209	545.2641	1072.4944	536.7508	N	1396.6589	698.8331	1379.6323	690.3198	12
12	1118.5475	559.7774	1101.5209	551.2641	1146.5424	573.7748	1129.5159	565.2616	G	1279.6277	640.3175	1262.6012	631.8042	11
13	1205.5795	603.2934	1188.5530	594.7801	1233.5744	617.2909	1216.5479	608.7776	S	1222.6062	611.8068	1205.5797	603.2935	10
14	1319.6224	660.3149	1302.5959	651.8016	1347.6174	674.3123	1330.5908	665.7990	N	1135.5742	568.2907	1118.5477	559.7775	9
15	1466.6909	733.8491	1449.6643	725.3358	1494.6858	747.8465	1477.6592	739.3333	F	1021.5313	511.2693	1004.5047	502.7560	8
16	1594.7494	797.8784	1577.7229	789.3651	1622.7444	811.8758	1605.7178	803.3625	Q	874.4629	437.7351	857.4363	429.2218	7
17	1707.8335	854.4204	1690.8070	845.9071	1735.8284	868.4178	1718.8019	859.9046	L	746.4043	373.7058	729.3777	365.1925	6
18	1836.8761	918.9417	1819.8495	910.4284	1864.8710	932.9391	1847.8445	924.4259	E	633.3202	317.1638	616.2937	308.6505	5
19	1965.9187	983.4630	1948.8921	974.9497	1993.9136	997.4604	1976.8871	988.9472	E	504.2776	252.6425	487.2511	244.1292	4
20	2079.0028	1040.0050	2061.9762	1031.4917	2106.9977	1054.0025	2089.9711	1045.4892	I	375.2350	188.1212	358.2085	179.6079	3
21	2166.0348	1083.5210	2149.0082	1075.0078	2194.0297	1097.5185	2177.0031	1089.0052	S	262.1510	131.5791	245.1244	123.0659	2
22									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of ADGTVNQIEGEATPVNLTEPAK

Found in gi|4502163 in Ref_human, apolipoprotein D precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

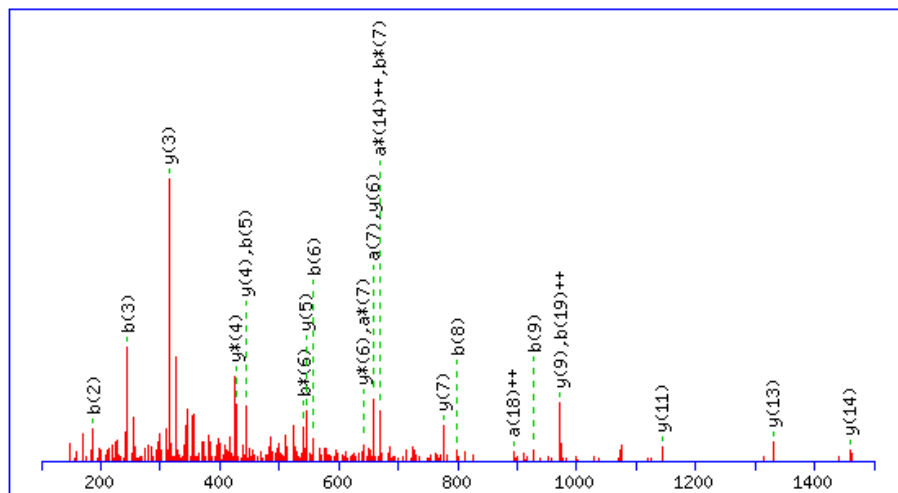


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	44.0495	22.5284			72.0444	36.5258			A					22
2	159.0764	80.0418			187.0713	94.0393			D	2186.0709	1093.5391	2169.0443	1085.0258	21
3	216.0979	108.5526			244.0928	122.5500			G	2071.0440	1036.0256	2054.0174	1027.5123	20
4	317.1456	159.0764			345.1405	173.0739			T	2014.0225	1007.5149	1996.9959	999.0016	19
5	416.2140	208.6106			444.2089	222.6081			V	1912.9748	956.9910	1895.9483	948.4778	18
6	530.2569	265.6321	513.2304	257.1188	558.2518	279.6295	541.2253	271.1163	N	1813.9064	907.4568	1796.8798	898.9436	17
7	658.3155	329.6614	641.2889	321.1481	686.3104	343.6588	669.2838	335.1456	Q	1699.8635	850.4354	1682.8369	841.9221	16
8	771.3995	386.2034	754.3730	377.6901	799.3945	400.2009	782.3679	391.6876	I	1571.8049	786.4061	1554.7783	777.8928	15
9	900.4421	450.7247	883.4156	442.2114	928.4371	464.7222	911.4105	456.2089	E	1458.7208	729.8641	1441.6943	721.3508	14
10	957.4636	479.2354	940.4371	470.7222	985.4585	493.2329	968.4320	484.7196	G	1329.6782	665.3428	1312.6517	656.8295	13
11	1086.5062	543.7567	1069.4796	535.2435	1114.5011	557.7542	1097.4746	549.2409	E	1272.6568	636.8320	1255.6302	628.3187	12
12	1157.5433	579.2753	1140.5168	570.7620	1185.5382	593.2727	1168.5117	584.7595	A	1143.6142	572.3107	1126.5876	563.7975	11
13	1258.5910	629.7991	1241.5644	621.2859	1286.5859	643.7966	1269.5594	635.2833	T	1072.5771	536.7922	1055.5505	528.2789	10
14	1355.6438	678.3255	1338.6172	669.8122	1383.6387	692.3230	1366.6121	683.8097	P	971.5294	486.2683	954.5028	477.7551	9
15	1454.7122	727.8597	1437.6856	719.3464	1482.7071	741.8572	1465.6805	733.3439	V	874.4766	437.7419	857.4501	429.2287	8
16	1571.7434	786.3753	1554.7168	777.8620	1599.7383	800.3728	1582.7117	791.8595	N	775.4082	388.2077	758.3817	379.6945	7
17	1684.8274	842.9173	1667.8009	834.4041	1712.8223	856.9148	1695.7958	848.4015	L	658.3770	329.6921	641.3505	321.1789	6
18	1785.8751	893.4412	1768.8485	884.9279	1813.8700	907.4386	1796.8435	898.9254	T	545.2930	273.1501	528.2664	264.6368	5
19	1914.9177	957.9625	1897.8911	949.4492	1942.9126	971.9599	1925.8861	963.4467	E	444.2453	222.6263	427.2187	214.1130	4
20	2011.9705	1006.4889	1994.9439	997.9756	2039.9654	1020.4863	2022.9388	1011.9730	P	315.2027	158.1050	298.1761	149.5917	3
21	2083.0076	1042.0074	2065.9810	1033.4941	2111.0025	1056.0049	2093.9759	1047.4916	A	218.1499	109.5786	201.1234	101.0653	2
22									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of ADGTVNQIEGEATPVNLTEPAK

Found in gi|4502163 in Ref_human, apolipoprotein D precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

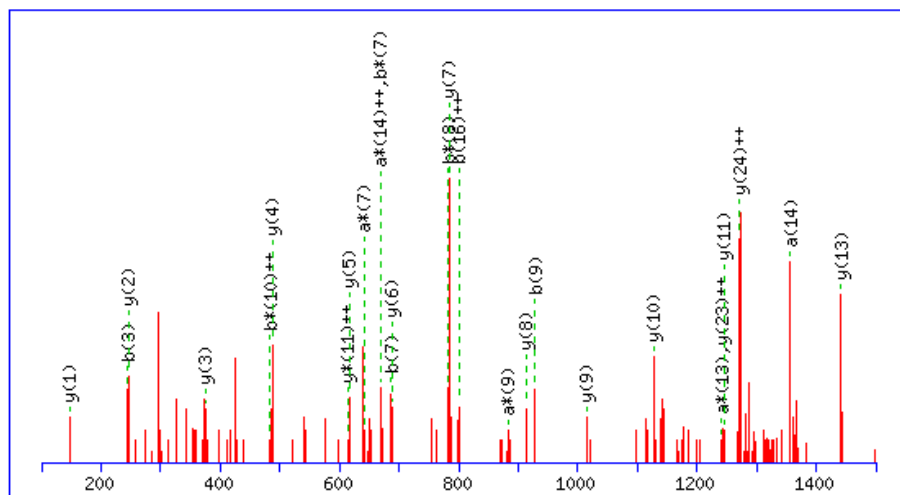


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	44.0495	22.5284			72.0444	36.5258			A					22
2	159.0764	80.0418			187.0713	94.0393			D	2186.0709	1093.5391	2169.0443	1085.0258	21
3	216.0979	108.5526			244.0928	122.5500			G	2071.0440	1036.0256	2054.0174	1027.5123	20
4	317.1456	159.0764			345.1405	173.0739			T	2014.0225	1007.5149	1996.9959	999.0016	19
5	416.2140	208.6106			444.2089	222.6081			V	1912.9748	956.9910	1895.9483	948.4778	18
6	530.2569	265.6321	513.2304	257.1188	558.2518	279.6295	541.2253	271.1163	N	1813.9064	907.4568	1796.8798	898.9436	17
7	658.3155	329.6614	641.2889	321.1481	686.3104	343.6588	669.2838	335.1456	Q	1699.8635	850.4354	1682.8369	841.9221	16
8	771.3995	386.2034	754.3730	377.6901	799.3945	400.2009	782.3679	391.6876	I	1571.8049	786.4061	1554.7783	777.8928	15
9	900.4421	450.7247	883.4156	442.2114	928.4371	464.7222	911.4105	456.2089	E	1458.7208	729.8641	1441.6943	721.3508	14
10	957.4636	479.2354	940.4371	470.7222	985.4585	493.2329	968.4320	484.7196	G	1329.6782	665.3428	1312.6517	656.8295	13
11	1086.5062	543.7567	1069.4796	535.2435	1114.5011	557.7542	1097.4746	549.2409	E	1272.6568	636.8320	1255.6302	628.3187	12
12	1157.5433	579.2753	1140.5168	570.7620	1185.5382	593.2727	1168.5117	584.7595	A	1143.6142	572.3107	1126.5876	563.7975	11
13	1258.5910	629.7991	1241.5644	621.2859	1286.5859	643.7966	1269.5594	635.2833	T	1072.5771	536.7922	1055.5505	528.2789	10
14	1355.6438	678.3255	1338.6172	669.8122	1383.6387	692.3230	1366.6121	683.8097	P	971.5294	486.2683	954.5028	477.7551	9
15	1454.7122	727.8597	1437.6856	719.3464	1482.7071	741.8572	1465.6805	733.3439	V	874.4766	437.7419	857.4501	429.2287	8
16	1571.7434	786.3753	1554.7168	777.8620	1599.7383	800.3728	1582.7117	791.8595	N	775.4082	388.2077	758.3817	379.6945	7
17	1684.8274	842.9173	1667.8009	834.4041	1712.8223	856.9148	1695.7958	848.4015	L	658.3770	329.6921	641.3505	321.1789	6
18	1785.8751	893.4412	1768.8485	884.9279	1813.8700	907.4386	1796.8435	898.9254	T	545.2930	273.1501	528.2664	264.6368	5
19	1914.9177	957.9625	1897.8911	949.4492	1942.9126	971.9599	1925.8861	963.4467	E	444.2453	222.6263	427.2187	214.1130	4
20	2011.9705	1006.4889	1994.9439	997.9756	2039.9654	1020.4863	2022.9388	1011.9730	P	315.2027	158.1050	298.1761	149.5917	3
21	2083.0076	1042.0074	2065.9810	1033.4941	2111.0025	1056.0049	2093.9759	1047.4916	A	218.1499	109.5786	201.1234	101.0653	2
22									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of ADGTVNQIEGEATPVNLTEPAKLEVK

Found in gi|4502163 in Ref_human, apolipoprotein D precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

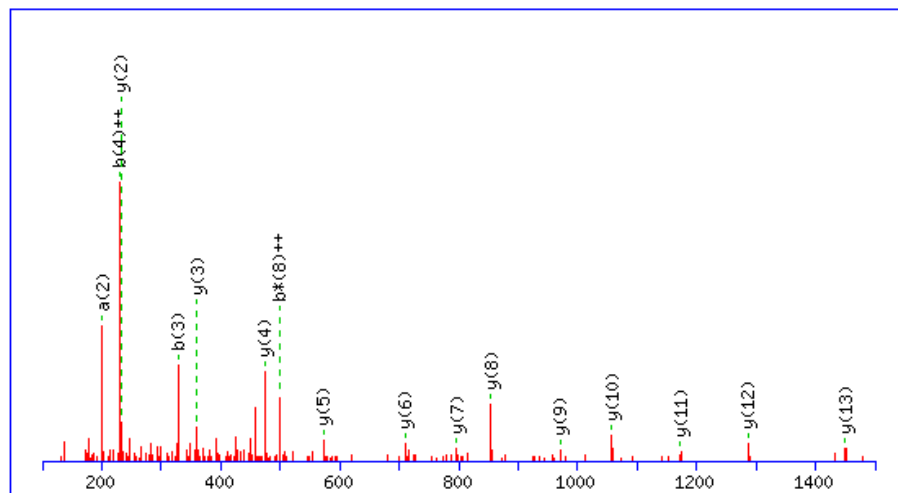


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	44.0495	22.5284			72.0444	36.5258			A					26
2	159.0764	80.0418			187.0713	94.0393			D	2655.3609	1328.1841	2638.3344	1319.6708	25
3	216.0979	108.5526			244.0928	122.5500			G	2540.3340	1270.6706	2523.3074	1262.1574	24
4	317.1456	159.0764			345.1405	173.0739			T	2483.3125	1242.1599	2466.2860	1233.6466	23
5	416.2140	208.6106			444.2089	222.6081			V	2382.2648	1191.6361	2365.2383	1183.1228	22
6	530.2569	265.6321	513.2304	257.1188	558.2518	279.6295	541.2253	271.1163	N	2283.1964	1142.1019	2266.1699	1133.5886	21
7	658.3155	329.6614	641.2889	321.1481	686.3104	343.6588	669.2838	335.1456	Q	2169.1535	1085.0804	2152.1270	1076.5671	20
8	771.3995	386.2034	754.3730	377.6901	799.3945	400.2009	782.3679	391.6876	I	2041.0949	1021.0511	2024.0684	1012.5378	19
9	900.4421	450.7247	883.4156	442.2114	928.4371	464.7222	911.4105	456.2089	E	1928.0109	964.5091	1910.9843	955.9958	18
10	957.4636	479.2354	940.4371	470.7222	985.4585	493.2329	968.4320	484.7196	G	1798.9683	899.9878	1781.9417	891.4745	17
11	1086.5062	543.7567	1069.4796	535.2435	1114.5011	557.7542	1097.4746	549.2409	E	1741.9468	871.4770	1724.9203	862.9638	16
12	1157.5433	579.2753	1140.5168	570.7620	1185.5382	593.2727	1168.5117	584.7595	A	1612.9042	806.9557	1595.8777	798.4425	15
13	1258.5910	629.7991	1241.5644	621.2859	1286.5859	643.7966	1269.5594	635.2833	T	1541.8671	771.4372	1524.8405	762.9239	14
14	1355.6438	678.3255	1338.6172	669.8122	1383.6387	692.3230	1366.6121	683.8097	P	1440.8194	720.9133	1423.7929	712.4001	13
15	1454.7122	727.8597	1437.6856	719.3464	1482.7071	741.8572	1465.6805	733.3439	V	1343.7667	672.3870	1326.7401	663.8737	12
16	1571.7434	786.3753	1554.7168	777.8620	1599.7383	800.3728	1582.7117	791.8595	N	1244.6982	622.8528	1227.6717	614.3395	11
17	1684.8274	842.9173	1667.8009	834.4041	1712.8223	856.9148	1695.7958	848.4015	L	1127.6671	564.3372	1110.6405	555.8239	10
18	1785.8751	893.4412	1768.8485	884.9279	1813.8700	907.4386	1796.8435	898.9254	T	1014.5830	507.7951	997.5564	499.2819	9
19	1914.9177	957.9625	1897.8911	949.4492	1942.9126	971.9599	1925.8861	963.4467	E	913.5353	457.2713	896.5088	448.7580	8
20	2011.9705	1006.4889	1994.9439	997.9756	2039.9654	1020.4863	2022.9388	1011.9730	P	784.4927	392.7500	767.4662	384.2367	7
21	2083.0076	1042.0074	2065.9810	1033.4941	2111.0025	1056.0049	2093.9759	1047.4916	A	687.4400	344.2236	670.4134	335.7103	6
22	2211.1025	1106.0549	2194.0760	1097.5416	2239.0974	1120.0524	2222.0709	1111.5391	K	616.4028	308.7051	599.3763	300.1918	5
23	2324.1866	1162.5969	2307.1600	1154.0837	2352.1815	1176.5944	2335.1550	1168.0811	L	488.3079	244.6576	471.2813	236.1443	4
24	2453.2292	1227.1182	2436.2026	1218.6050	2481.2241	1241.1157	2464.1976	1232.6024	E	375.2238	188.1155	358.1973	179.6023	3
25	2552.2976	1276.6524	2535.2711	1268.1392	2580.2925	1290.6499	2563.2660	1282.1366	V	246.1812	123.5942	229.1547	115.0810	2
26									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of DIVEYYNDSNGSHVLQGR

Found in gi|4502337 in Ref_human, zinc-alpha-2-glycoprotein precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

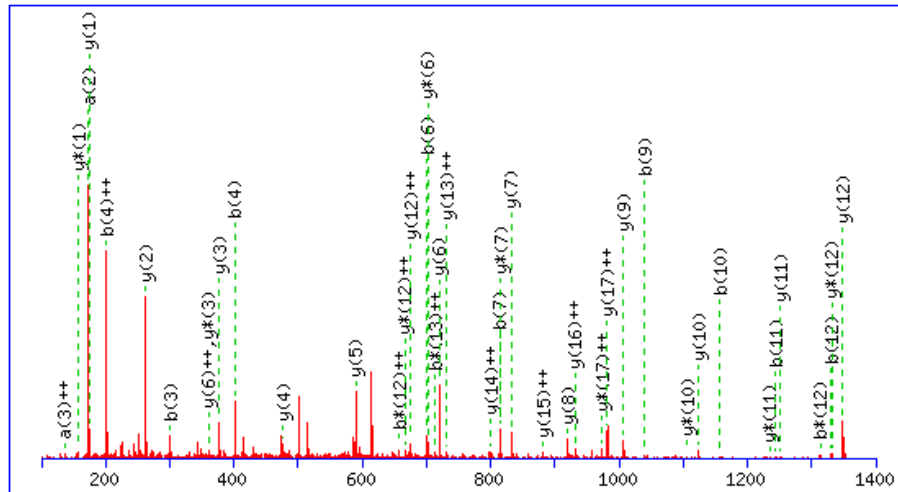


#	a	a ⁺⁺	a [*]	a ⁺⁺⁺	b	b ⁺⁺	b [*]	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ⁺⁺⁺	#
1	88.0393	44.5233			116.0342	58.5207			D					18
2	201.1234	101.0653			229.1183	115.0628			I	1953.9187	977.4630	1936.8921	968.9497	17
3	300.1918	150.5995			328.1867	164.5970			V	1840.8346	920.9210	1823.8081	912.4077	16
4	429.2344	215.1208			457.2293	229.1183			E	1741.7662	871.3867	1724.7397	862.8735	15
5	592.2977	296.6525			620.2926	310.6499			Y	1612.7236	806.8654	1595.6971	798.3522	14
6	755.3610	378.1842			783.3559	392.1816			Y	1449.6603	725.3338	1432.6337	716.8205	13
7	869.4040	435.2056	852.3774	426.6923	897.3989	449.2031	880.3723	440.6898	N	1286.5970	643.8021	1269.5704	635.2888	12
8	984.4309	492.7191	967.4044	484.2058	1012.4258	506.7165	995.3993	498.2033	D	1172.5540	586.7807	1155.5275	578.2674	11
9	1071.4629	536.2351	1054.4364	527.7218	1099.4578	550.2326	1082.4313	541.7193	S	1057.5271	529.2672	1040.5005	520.7539	10
10	1188.4941	594.7507	1171.4676	586.2374	1216.4890	608.7482	1199.4625	600.2349	N	970.4951	485.7512	953.4685	477.2379	9
11	1245.5156	623.2614	1228.4890	614.7482	1273.5105	637.2589	1256.4839	628.7456	G	853.4639	427.2356	836.4373	418.7223	8
12	1332.5476	666.7774	1315.5211	658.2642	1360.5425	680.7749	1343.5160	672.2616	S	796.4424	398.7248	779.4159	390.2116	7
13	1469.6065	735.3069	1452.5800	726.7936	1497.6014	749.3044	1480.5749	740.7911	H	709.4104	355.2088	692.3838	346.6956	6
14	1568.6749	784.8411	1551.6484	776.3278	1596.6699	798.8386	1579.6433	790.3253	V	572.3515	286.6794	555.3249	278.1661	5
15	1681.7590	841.3831	1664.7325	832.8699	1709.7539	855.3806	1692.7274	846.8673	L	473.2831	237.1452	456.2565	228.6319	4
16	1809.8176	905.4124	1792.7910	896.8992	1837.8125	919.4099	1820.7859	910.8966	Q	360.1990	180.6031	343.1724	172.0899	3
17	1866.8390	933.9232	1849.8125	925.4099	1894.8340	947.9206	1877.8074	939.4073	G	232.1404	116.5738	215.1139	108.0606	2
18									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of TVVTYHIPQNSSLENVDSR

Found in gi|27477039 in Ref_human, ICOS ligand precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

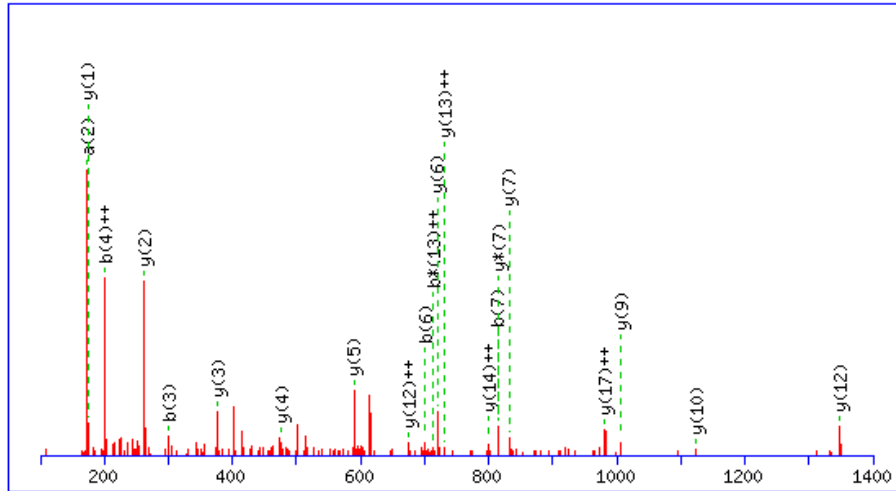


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	74.0600	37.5337			102.0550	51.5311			T					19
2	173.1285	87.0679			201.1234	101.0653			V	2061.0133	1031.0103	2043.9868	1022.4970	18
3	272.1969	136.6021			300.1918	150.5995			V	1961.9449	981.4761	1944.9184	972.9628	17
4	373.2445	187.1259			401.2395	201.1234			T	1862.8765	931.9419	1845.8499	923.4286	16
5	536.3079	268.6576			564.3028	282.6550			Y	1761.8288	881.4180	1744.8023	872.9048	15
6	673.3668	337.1870			701.3617	351.1845			H	1598.7655	799.8864	1581.7389	791.3731	14
7	786.4509	393.7291			814.4458	407.7265			I	1461.7066	731.3569	1444.6800	722.8436	13
8	883.5036	442.2554			911.4985	456.2529			P	1348.6225	674.8149	1331.5960	666.3016	12
9	1011.5622	506.2847	994.5356	497.7715	1039.5571	520.2822	1022.5306	511.7689	Q	1251.5697	626.2885	1234.5432	617.7752	11
10	1128.5934	564.8003	1111.5668	556.2871	1156.5883	578.7978	1139.5617	570.2845	N	1123.5112	562.2592	1106.4846	553.7459	10
11	1215.6254	608.3163	1198.5989	599.8031	1243.6203	622.3138	1226.5938	613.8005	S	1006.4800	503.7436	989.4534	495.2304	9
12	1302.6574	651.8324	1285.6309	643.3191	1330.6524	665.8298	1313.6258	657.3165	S	919.4479	460.2276	902.4214	451.7143	8
13	1415.7415	708.3744	1398.7150	699.8611	1443.7364	722.3718	1426.7099	713.8586	L	832.4159	416.7116	815.3894	408.1983	7
14	1544.7841	772.8957	1527.7575	764.3824	1572.7790	786.8931	1555.7525	778.3799	E	719.3319	360.1696	702.3053	351.6563	6
15	1658.8270	829.9171	1641.8005	821.4039	1686.8219	843.9146	1669.7954	835.4013	N	590.2893	295.6483	573.2627	287.1350	5
16	1757.8954	879.4514	1740.8689	870.9381	1785.8904	893.4488	1768.8638	884.9355	V	476.2463	238.6268	459.2198	230.1135	4
17	1872.9224	936.9648	1855.8958	928.4516	1900.9173	950.9623	1883.8907	942.4490	D	377.1779	189.0926	360.1514	180.5793	3
18	1959.9544	980.4808	1942.9279	971.9676	1987.9493	994.4783	1970.9228	985.9650	S	262.1510	131.5791	245.1244	123.0659	2
19									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of TVVTYHIPQNSSLENVDSR

Found in gi|27477039 in Ref_human, ICOS ligand precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

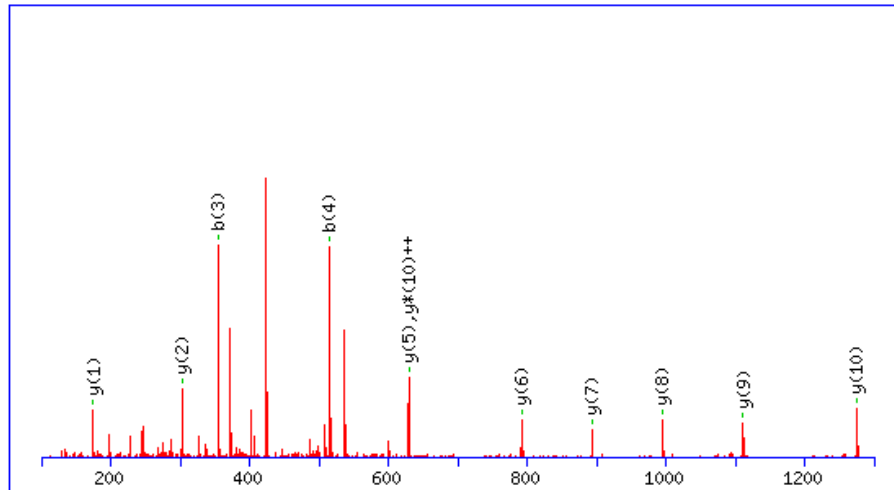


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	74.0600	37.5337			102.0550	51.5311			T					19
2	173.1285	87.0679			201.1234	101.0653			V	2061.0133	1031.0103	2043.9868	1022.4970	18
3	272.1969	136.6021			300.1918	150.5995			V	1961.9449	981.4761	1944.9184	972.9628	17
4	373.2445	187.1259			401.2395	201.1234			T	1862.8765	931.9419	1845.8499	923.4286	16
5	536.3079	268.6576			564.3028	282.6550			Y	1761.8288	881.4180	1744.8023	872.9048	15
6	673.3668	337.1870			701.3617	351.1845			H	1598.7655	799.8864	1581.7389	791.3731	14
7	786.4509	393.7291			814.4458	407.7265			I	1461.7066	731.3569	1444.6800	722.8436	13
8	883.5036	442.2554			911.4985	456.2529			P	1348.6225	674.8149	1331.5960	666.3016	12
9	1011.5622	506.2847	994.5356	497.7715	1039.5571	520.2822	1022.5306	511.7689	Q	1251.5697	626.2885	1234.5432	617.7752	11
10	1128.5934	564.8003	1111.5668	556.2871	1156.5883	578.7978	1139.5617	570.2845	N	1123.5112	562.2592	1106.4846	553.7459	10
11	1215.6254	608.3163	1198.5989	599.8031	1243.6203	622.3138	1226.5938	613.8005	S	1006.4800	503.7436	989.4534	495.2304	9
12	1302.6574	651.8324	1285.6309	643.3191	1330.6524	665.8298	1313.6258	657.3165	S	919.4479	460.2276	902.4214	451.7143	8
13	1415.7415	708.3744	1398.7150	699.8611	1443.7364	722.3718	1426.7099	713.8586	L	832.4159	416.7116	815.3894	408.1983	7
14	1544.7841	772.8957	1527.7575	764.3824	1572.7790	786.8931	1555.7525	778.3799	E	719.3319	360.1696	702.3053	351.6563	6
15	1658.8270	829.9171	1641.8005	821.4039	1686.8219	843.9146	1669.7954	835.4013	N	590.2893	295.6483	573.2627	287.1350	5
16	1757.8954	879.4514	1740.8689	870.9381	1785.8904	893.4488	1768.8638	884.9355	V	476.2463	238.6268	459.2198	230.1135	4
17	1872.9224	936.9648	1855.8958	928.4516	1900.9173	950.9623	1883.8907	942.4490	D	377.1779	189.0926	360.1514	180.5793	3
18	1959.9544	980.4808	1942.9279	971.9676	1987.9493	994.4783	1970.9228	985.9650	S	262.1510	131.5791	245.1244	123.0659	2
19									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of QDQCIYNTTYLNVQR

Found in gi|167857790 in Ref_human, alpha-1-acid glycoprotein 1 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

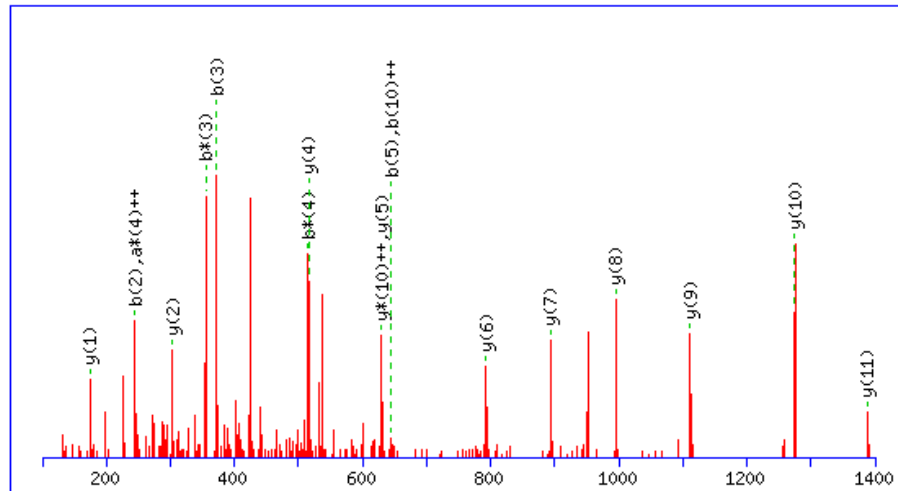


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	84.0444	42.5258	67.0178	34.0126	112.0393	56.5233	95.0128	48.0100	Q					15
2	199.0713	100.0393	182.0448	91.5260	227.0662	114.0368	210.0397	105.5235	D	1790.8264	895.9168	1773.7998	887.4036	14
3	327.1299	164.0686	310.1034	155.5553	355.1248	178.0661	338.0983	169.5528	Q	1675.7994	838.4034	1658.7729	829.8901	13
4	487.1606	244.0839	470.1340	235.5706	515.1555	258.0814	498.1289	249.5681	C	1547.7409	774.3741	1530.7143	765.8608	12
5	600.2446	300.6260	583.2181	292.1127	628.2395	314.6234	611.2130	306.1101	I	1387.7102	694.3587	1370.6837	685.8455	11
6	763.3080	382.1576	746.2814	373.6443	791.3029	396.1551	774.2763	387.6418	Y	1274.6261	637.8167	1257.5996	629.3034	10
7	880.3391	440.6732	863.3126	432.1599	908.3341	454.6707	891.3075	446.1574	N	1111.5628	556.2850	1094.5363	547.7718	9
8	981.3868	491.1970	964.3603	482.6838	1009.3817	505.1945	992.3552	496.6812	T	994.5316	497.7694	977.5051	489.2562	8
9	1082.4345	541.7209	1065.4080	533.2076	1110.4294	555.7183	1093.4029	547.2051	T	893.4839	447.2456	876.4574	438.7323	7
10	1245.4978	623.2526	1228.4713	614.7393	1273.4927	637.2500	1256.4662	628.7367	Y	792.4363	396.7218	775.4097	388.2085	6
11	1358.5819	679.7946	1341.5553	671.2813	1386.5768	693.7920	1369.5503	685.2788	L	629.3729	315.1901	612.3464	306.6768	5
12	1472.6248	736.8160	1455.5983	728.3028	1500.6197	750.8135	1483.5932	742.3002	N	516.2889	258.6481	499.2623	250.1348	4
13	1571.6932	786.3503	1554.6667	777.8370	1599.6881	800.3477	1582.6616	791.8344	V	402.2459	201.6266	385.2194	193.1133	3
14	1699.7518	850.3795	1682.7253	841.8663	1727.7467	864.3770	1710.7202	855.8637	Q	303.1775	152.0924	286.1510	143.5791	2
15									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of QDQCIYNTTYLNVQR

Found in gi|167857790 in Ref_human, alpha-1-acid glycoprotein 1 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

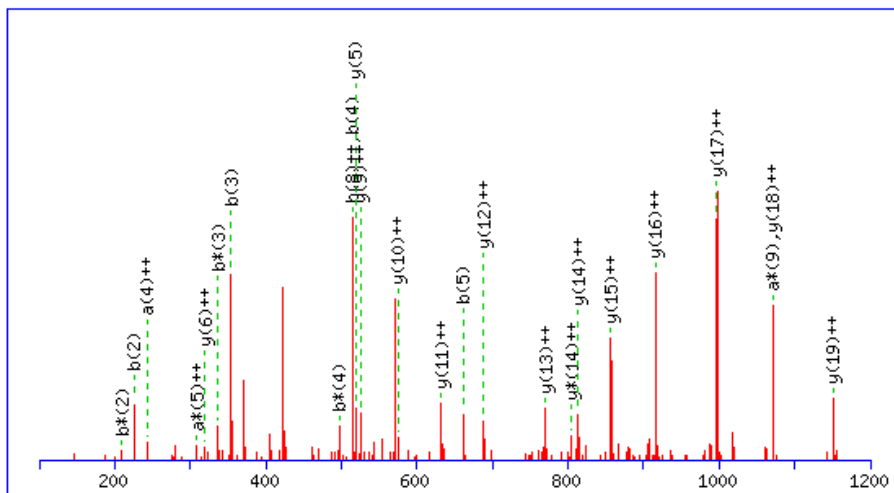


#	a	a ⁺⁺	a [*]	a ⁺⁺	b	b ⁺⁺	b [*]	b ⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ⁺⁺	#
1	101.0709	51.0391	84.0444	42.5258	129.0659	65.0366	112.0393	56.5233	Q					15
2	216.0979	108.5526	199.0713	100.0393	244.0928	122.5500	227.0662	114.0368	D	1790.8264	895.9168	1773.7998	887.4036	14
3	344.1565	172.5819	327.1299	164.0686	372.1514	186.5793	355.1248	178.0661	Q	1675.7994	838.4034	1658.7729	829.8901	13
4	504.1871	252.5972	487.1606	244.0839	532.1820	266.5947	515.1555	258.0814	C	1547.7409	774.3741	1530.7143	765.8608	12
5	617.2712	309.1392	600.2446	300.6260	645.2661	323.1367	628.2395	314.6234	I	1387.7102	694.3587	1370.6837	685.8455	11
6	780.3345	390.6709	763.3080	382.1576	808.3294	404.6683	791.3029	396.1551	Y	1274.6261	637.8167	1257.5996	629.3034	10
7	897.3657	449.1865	880.3391	440.6732	925.3606	463.1839	908.3341	454.6707	N	1111.5628	556.2850	1094.5363	547.7718	9
8	998.4134	499.7103	981.3868	491.1970	1026.4083	513.7078	1009.3817	505.1945	T	994.5316	497.7694	977.5051	489.2562	8
9	1099.4610	550.2342	1082.4345	541.7209	1127.4560	564.2316	1110.4294	555.7183	T	893.4839	447.2456	876.4574	438.7323	7
10	1262.5244	631.7658	1245.4978	623.2526	1290.5193	645.7633	1273.4927	637.2500	Y	792.4363	396.7218	775.4097	388.2085	6
11	1375.6084	688.3079	1358.5819	679.7946	1403.6034	702.3053	1386.5768	693.7920	L	629.3729	315.1901	612.3464	306.6768	5
12	1489.6514	745.3293	1472.6248	736.8160	1517.6463	759.3268	1500.6197	750.8135	N	516.2889	258.6481	499.2623	250.1348	4
13	1588.7198	794.8635	1571.6932	786.3503	1616.7147	808.8610	1599.6881	800.3477	V	402.2459	201.6266	385.2194	193.1133	3
14	1716.7784	858.8928	1699.7518	850.3795	1744.7733	872.8903	1727.7467	864.3770	Q	303.1775	152.0924	286.1510	143.5791	2
15									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of QNQCIFYNSSYLNQRENGTVSR

Found in gi|4505529 in Ref_human, alpha-1-acid glycoprotein 2 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

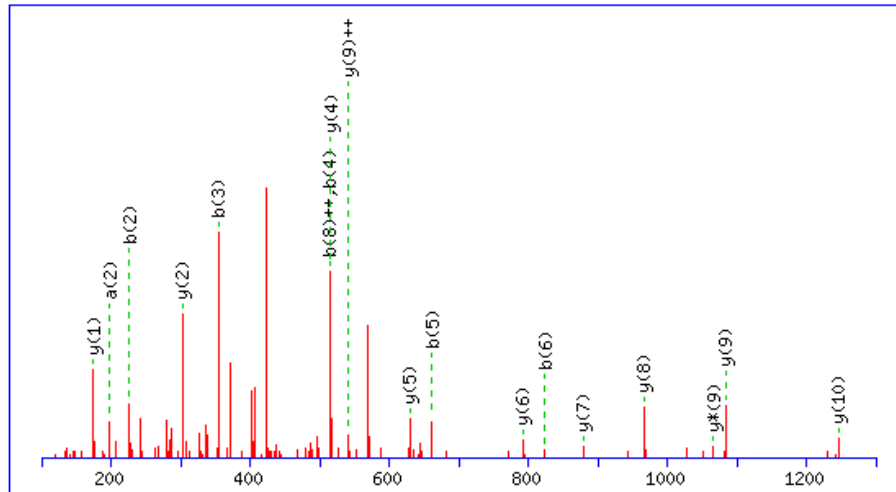


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	84.0444	42.5258	67.0178	34.0126	112.0393	56.5233	95.0128	48.0100	Q					22
2	198.0873	99.5473	181.0608	91.0340	226.0822	113.5448	209.0557	105.0315	N	2542.1399	1271.5736	2525.1133	1263.0603	21
3	326.1459	163.5766	309.1193	155.0633	354.1408	177.5740	337.1143	169.0608	Q	2428.0970	1214.5521	2411.0704	1206.0388	20
4	486.1765	243.5919	469.1500	235.0786	514.1715	257.5894	497.1449	249.0761	C	2300.0384	1150.5228	2283.0118	1142.0096	19
5	633.2450	317.1261	616.2184	308.6128	661.2399	331.1236	644.2133	322.6103	F	2140.0077	1070.5075	2122.9812	1061.9942	18
6	796.3083	398.6578	779.2817	390.1445	824.3032	412.6552	807.2767	404.1420	Y	1992.9393	996.9733	1975.9128	988.4600	17
7	913.3395	457.1734	896.3129	448.6601	941.3344	471.1708	924.3078	462.6576	N	1829.8760	915.4416	1812.8494	906.9284	16
8	1000.3715	500.6894	983.3450	492.1761	1028.3664	514.6868	1011.3399	506.1736	S	1712.8448	856.9260	1695.8182	848.4128	15
9	1087.4035	544.2054	1070.3770	535.6921	1115.3984	558.2029	1098.3719	549.6896	S	1625.8128	813.4100	1608.7862	804.8967	14
10	1250.4669	625.7371	1233.4403	617.2238	1278.4618	639.7345	1261.4352	631.2213	Y	1538.7807	769.8940	1521.7542	761.3807	13
11	1363.5509	682.2791	1346.5244	673.7658	1391.5458	696.2766	1374.5193	687.7633	L	1375.7174	688.3623	1358.6909	679.8491	12
12	1477.5939	739.3006	1460.5673	730.7873	1505.5888	753.2980	1488.5622	744.7847	N	1262.6333	631.8203	1245.6068	623.3070	11
13	1576.6623	788.8348	1559.6357	780.3215	1604.6572	802.8322	1587.6306	794.3190	V	1148.5904	574.7988	1131.5639	566.2856	10
14	1704.7208	852.8641	1687.6943	844.3508	1732.7158	866.8615	1715.6892	858.3482	Q	1049.5220	525.2646	1032.4955	516.7514	9
15	1860.8220	930.9146	1843.7954	922.4013	1888.8169	944.9121	1871.7903	936.3988	R	921.4634	461.2354	904.4369	452.7221	8
16	1989.8645	995.4359	1972.8380	986.9226	2017.8595	1009.4334	2000.8329	1000.9201	E	765.3623	383.1848	748.3358	374.6715	7
17	2106.8957	1053.9515	2089.8692	1045.4382	2134.8906	1067.9490	2117.8641	1059.4357	N	636.3197	318.6635	619.2932	310.1502	6
18	2163.9172	1082.4622	2146.8906	1073.9490	2191.9121	1096.4597	2174.8856	1087.9464	G	519.2885	260.1479	502.2620	251.6346	5
19	2264.9649	1132.9861	2247.9383	1124.4728	2292.9598	1146.9835	2275.9332	1138.4703	T	462.2671	231.6372	445.2405	223.1239	4
20	2364.0333	1182.5203	2347.0067	1174.0070	2392.0282	1196.5177	2375.0017	1188.0045	V	361.2194	181.1133	344.1928	172.6001	3
21	2451.0653	1226.0363	2434.0388	1217.5230	2479.0602	1240.0338	2462.0337	1231.5205	S	262.1510	131.5791	245.1244	123.0659	2
22									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of QNQCFYNSSYLNQVR

Found in gi|4505529 in Ref_human, alpha-1-acid glycoprotein 2 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

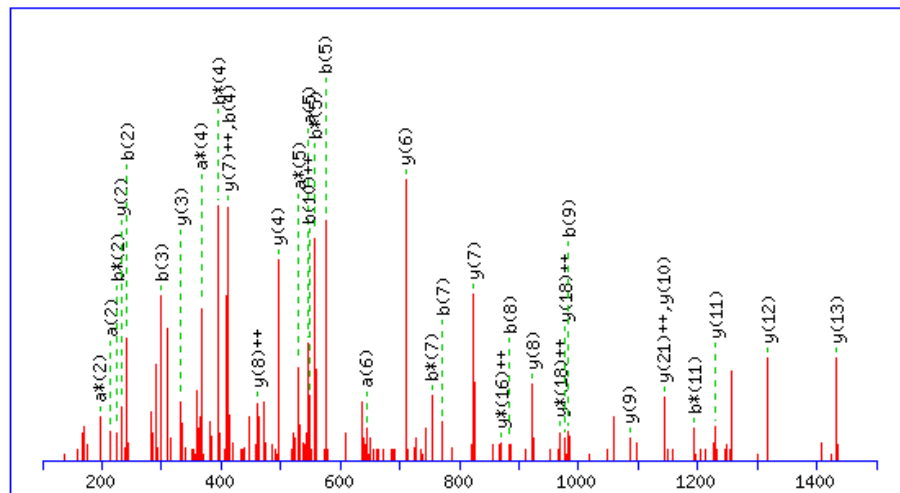


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	84.0444	42.5258	67.0178	34.0126	112.0393	56.5233	95.0128	48.0100	Q					15
2	198.0873	99.5473	181.0608	91.0340	226.0822	113.5448	209.0557	105.0315	N	1795.7954	898.4013	1778.7689	889.8881	14
3	326.1459	163.5766	309.1193	155.0633	354.1408	177.5740	337.1143	169.0608	Q	1681.7525	841.3799	1664.7259	832.8666	13
4	486.1765	243.5919	469.1500	235.0786	514.1715	257.5894	497.1449	249.0761	C	1553.6939	777.3506	1536.6674	768.8373	12
5	633.2450	317.1261	616.2184	308.6128	661.2399	331.1236	644.2133	322.6103	F	1393.6633	697.3353	1376.6367	688.8220	11
6	796.3083	398.6578	779.2817	390.1445	824.3032	412.6552	807.2767	404.1420	Y	1246.5948	623.8011	1229.5683	615.2878	10
7	913.3395	457.1734	896.3129	448.6601	941.3344	471.1708	924.3078	462.6576	N	1083.5315	542.2694	1066.5050	533.7561	9
8	1000.3715	500.6894	983.3450	492.1761	1028.3664	514.6868	1011.3399	506.1736	S	966.5003	483.7538	949.4738	475.2405	8
9	1087.4035	544.2054	1070.3770	535.6921	1115.3984	558.2029	1098.3719	549.6896	S	879.4683	440.2378	862.4417	431.7245	7
10	1250.4669	625.7371	1233.4403	617.2238	1278.4618	639.7345	1261.4352	631.2213	Y	792.4363	396.7218	775.4097	388.2085	6
11	1363.5509	682.2791	1346.5244	673.7658	1391.5458	696.2766	1374.5193	687.7633	L	629.3729	315.1901	612.3464	306.6768	5
12	1477.5939	739.3006	1460.5673	730.7873	1505.5888	753.2980	1488.5622	744.7847	N	516.2889	258.6481	499.2623	250.1348	4
13	1576.6623	788.8348	1559.6357	780.3215	1604.6572	802.8322	1587.6306	794.3190	V	402.2459	201.6266	385.2194	193.1133	3
14	1704.7208	852.8641	1687.6943	844.3508	1732.7158	866.8615	1715.6892	858.3482	Q	303.1775	152.0924	286.1510	143.5791	2
15									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of QIGLYPVLVIDSSGYVNPNTGR

Found in gi|31377806 in Ref_human, polymeric immunoglobulin receptor precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

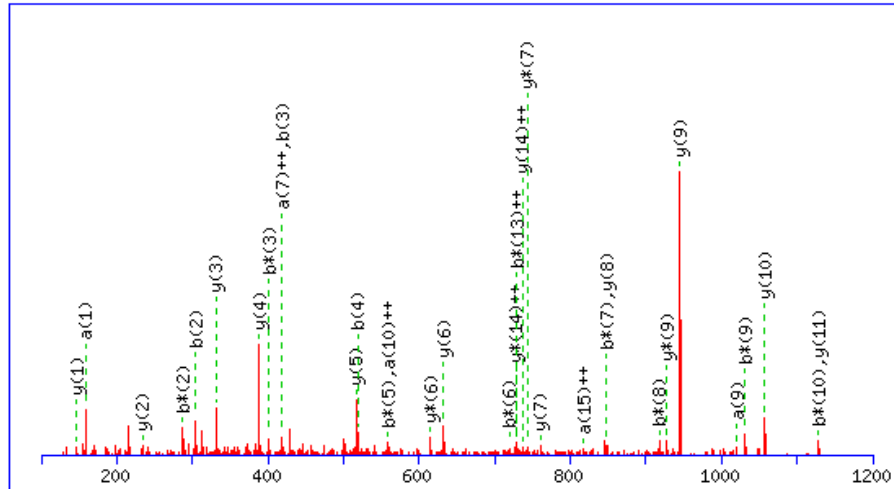


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	101.0709	51.0391	84.0444	42.5258	129.0659	65.0366	112.0393	56.5233	Q					23
2	214.1550	107.5811	197.1285	99.0679	242.1499	121.5786	225.1234	113.0653	I	2400.2331	1200.6202	2383.2066	1192.1069	22
3	271.1765	136.0919	254.1499	127.5786	299.1714	150.0893	282.1448	141.5761	G	2287.1491	1144.0782	2270.1225	1135.5649	21
4	384.2605	192.6339	367.2340	184.1206	412.2554	206.6314	395.2289	198.1181	L	2230.1276	1115.5674	2213.1011	1107.0542	20
5	547.3239	274.1656	530.2973	265.6523	575.3188	288.1630	558.2922	279.6498	Y	2117.0436	1059.0254	2100.0170	1050.5121	19
6	644.3766	322.6920	627.3501	314.1787	672.3715	336.6894	655.3450	328.1761	P	1953.9802	977.4938	1936.9537	968.9805	18
7	743.4450	372.2262	726.4185	363.7129	771.4400	386.2236	754.4134	377.7103	V	1856.9275	928.9674	1839.9009	920.4541	17
8	856.5291	428.7682	839.5026	420.2549	884.5240	442.7656	867.4975	434.2524	L	1757.8591	879.4332	1740.8325	870.9199	16
9	955.5975	478.3024	938.5710	469.7891	983.5924	492.2999	966.5659	483.7866	V	1644.7750	822.8911	1627.7484	814.3779	15
10	1068.6816	534.8444	1051.6550	526.3312	1096.6765	548.8419	1079.6499	540.3286	I	1545.7066	773.3569	1528.6800	764.8437	14
11	1183.7085	592.3579	1166.6820	583.8446	1211.7034	606.3554	1194.6769	597.8421	D	1432.6225	716.8149	1415.5960	708.3016	13
12	1270.7406	635.8739	1253.7140	627.3606	1298.7355	649.8714	1281.7089	641.3581	S	1317.5956	659.3014	1300.5690	650.7881	12
13	1357.7726	679.3899	1340.7460	670.8767	1385.7675	693.3874	1368.7409	684.8741	S	1230.5635	615.7854	1213.5370	607.2721	11
14	1414.7940	707.9007	1397.7675	699.3874	1442.7890	721.8981	1425.7624	713.3848	G	1143.5315	572.2694	1126.5050	563.7561	10
15	1577.8574	789.4323	1560.8308	780.9190	1605.8523	803.4298	1588.8257	794.9165	Y	1086.5100	543.7587	1069.4835	535.2454	9
16	1676.9258	838.9665	1659.8992	830.4533	1704.9207	852.9640	1687.8942	844.4507	V	923.4467	462.2270	906.4202	453.7137	8
17	1790.9687	895.9880	1773.9422	887.4747	1818.9636	909.9855	1801.9371	901.4722	N	824.3783	412.6928	807.3518	404.1795	7
18	1888.0215	944.5144	1870.9949	936.0011	1916.0164	958.5118	1898.9898	949.9986	P	710.3354	355.6713	693.3088	347.1581	6
19	2005.0527	1003.0300	1988.0261	994.5167	2033.0476	1017.0274	2016.0210	1008.5142	N	613.2826	307.1449	596.2561	298.6317	5
20	2168.1160	1084.5616	2151.0894	1076.0484	2196.1109	1098.5591	2179.0844	1090.0458	Y	496.2514	248.6293	479.2249	240.1161	4
21	2269.1637	1135.0855	2252.1371	1126.5722	2297.1586	1149.0829	2280.1320	1140.5697	T	333.1881	167.0977	316.1615	158.5844	3
22	2326.1851	1163.5962	2309.1586	1155.0829	2354.1801	1177.5937	2337.1535	1169.0804	G	232.1404	116.5738	215.1139	108.0606	2
23									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of WNNTGCQALPSQDEGPSK

Found in gi|31377806 in Ref_human, polymeric immunoglobulin receptor precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)



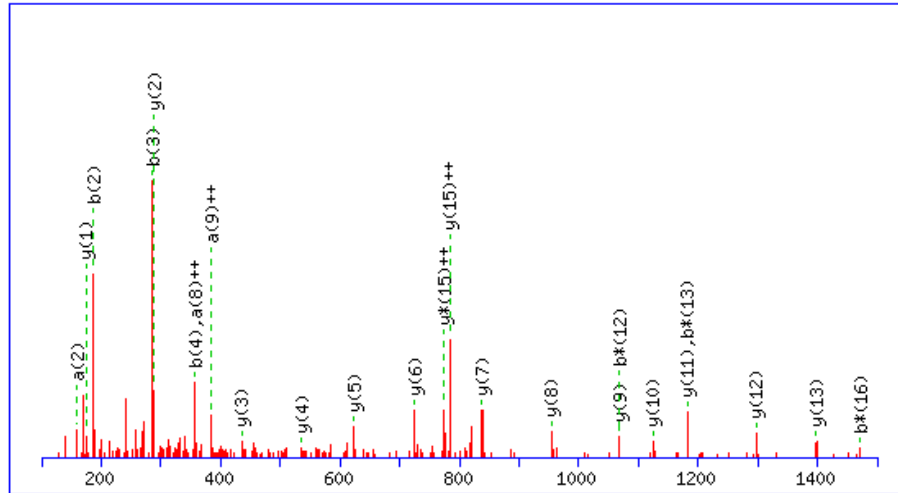
#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	159.0917	80.0495			187.0866	94.0469			W					18
2	276.1229	138.5651	259.0963	130.0518	304.1178	152.5625	287.0912	144.0493	N	1805.7856	903.3965	1788.7591	894.8832	17
3	390.1658	195.5865	373.1392	187.0733	418.1607	209.5840	401.1342	201.0707	N	1688.7544	844.8809	1671.7279	836.3676	16
4	491.2135	246.1104	474.1869	237.5971	519.2084	260.1078	502.1818	251.5946	T	1574.7115	787.8594	1557.6850	779.3461	15
5	548.2349	274.6211	531.2084	266.1078	576.2298	288.6186	559.2033	280.1053	G	1473.6638	737.3356	1456.6373	728.8223	14
6	708.2656	354.6364	691.2390	346.1232	736.2605	368.6339	719.2339	360.1206	C	1416.6424	708.8248	1399.6158	700.3115	13
7	836.3242	418.6657	819.2976	410.1524	864.3191	432.6632	847.2925	424.1499	Q	1256.6117	628.8095	1239.5852	620.2962	12
8	907.3613	454.1843	890.3347	445.6710	935.3562	468.1817	918.3296	459.6685	A	1128.5531	564.7802	1111.5266	556.2669	11
9	1020.4453	510.7263	1003.4188	502.2130	1048.4403	524.7238	1031.4137	516.2105	L	1057.5160	529.2617	1040.4895	520.7484	10
10	1117.4981	559.2527	1100.4716	550.7394	1145.4930	573.2501	1128.4665	564.7369	P	944.4320	472.7196	927.4054	464.2063	9
11	1204.5301	602.7687	1187.5036	594.2554	1232.5250	616.7662	1215.4985	608.2529	S	847.3792	424.1932	830.3527	415.6800	8
12	1332.5887	666.7980	1315.5622	658.2847	1360.5836	680.7954	1343.5571	672.2822	Q	760.3472	380.6772	743.3206	372.1640	7
13	1447.6157	724.3115	1430.5891	715.7982	1475.6106	738.3089	1458.5840	729.7956	D	632.2886	316.6479	615.2620	308.1347	6
14	1576.6582	788.8328	1559.6317	780.3195	1604.6532	802.8302	1587.6266	794.3169	E	517.2617	259.1345	500.2351	250.6212	5
15	1633.6797	817.3435	1616.6532	808.8302	1661.6746	831.3409	1644.6481	822.8277	G	388.2191	194.6132	371.1925	186.0999	4
16	1730.7325	865.8699	1713.7059	857.3566	1758.7274	879.8673	1741.7008	871.3541	P	331.1976	166.1024	314.1710	157.5892	3
17	1817.7645	909.3859	1800.7380	900.8726	1845.7594	923.3833	1828.7329	914.8701	S	234.1448	117.5761	217.1183	109.0628	2
18									K	147.1128	74.0600	130.0863	65.5468	1

PTGDS

MS/MS Fragmentation of SVVAPATDGGLNLTSTFLR

Found in gi|32171249 in Ref_human, prostaglandin-H2 D-isomerase precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

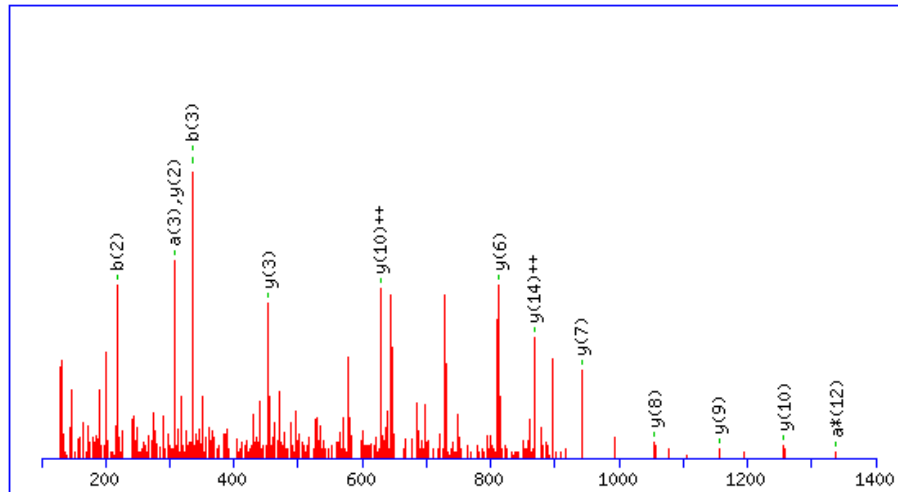


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	60.0444	30.5258			88.0393	44.5233			S					19
2	159.1128	80.0600			187.1077	94.0575			V	1834.9795	917.9934	1817.9530	909.4801	18
3	258.1812	129.5942			286.1761	143.5917			V	1735.9111	868.4592	1718.8845	859.9459	17
4	329.2183	165.1128			357.2132	179.1103			A	1636.8427	818.9250	1619.8161	810.4117	16
5	426.2711	213.6392			454.2660	227.6366			P	1565.8056	783.4064	1548.7790	774.8931	15
6	497.3082	249.1577			525.3031	263.1552			A	1468.7528	734.8800	1451.7262	726.3668	14
7	598.3559	299.6816			626.3508	313.6790			T	1397.7157	699.3615	1380.6891	690.8482	13
8	713.3828	357.1951			741.3777	371.1925			D	1296.6680	648.8376	1279.6415	640.3244	12
9	770.4043	385.7058			798.3992	399.7032			G	1181.6411	591.3242	1164.6145	582.8109	11
10	827.4258	414.2165			855.4207	428.2140			G	1124.6196	562.8134	1107.5930	554.3002	10
11	940.5098	470.7585			968.5047	484.7560			L	1067.5981	534.3027	1050.5716	525.7894	9
12	1057.5410	529.2741	1040.5145	520.7609	1085.5359	543.2716	1068.5094	534.7583	N	954.5141	477.7607	937.4875	469.2474	8
13	1170.6251	585.8162	1153.5985	577.3029	1198.6200	599.8136	1181.5934	591.3004	L	837.4829	419.2451	820.4563	410.7318	7
14	1271.6728	636.3400	1254.6462	627.8267	1299.6677	650.3375	1282.6411	641.8242	T	724.3988	362.7030	707.3723	354.1898	6
15	1358.7048	679.8560	1341.6782	671.3428	1386.6997	693.8535	1369.6731	685.3402	S	623.3511	312.1792	606.3246	303.6659	5
16	1459.7525	730.3799	1442.7259	721.8666	1487.7474	744.3773	1470.7208	735.8641	T	536.3191	268.6632	519.2926	260.1499	4
17	1606.8209	803.9141	1589.7943	795.4008	1634.8158	817.9115	1617.7892	809.3983	F	435.2714	218.1394	418.2449	209.6261	3
18	1719.9049	860.4561	1702.8784	851.9428	1747.8999	874.4536	1730.8733	865.9403	L	288.2030	144.6051	271.1765	136.0919	2
19									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of CGNCSLTTLKDEDFCK

Found in gi|62530391 in Ref_human, selenoprotein P isoform 1 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

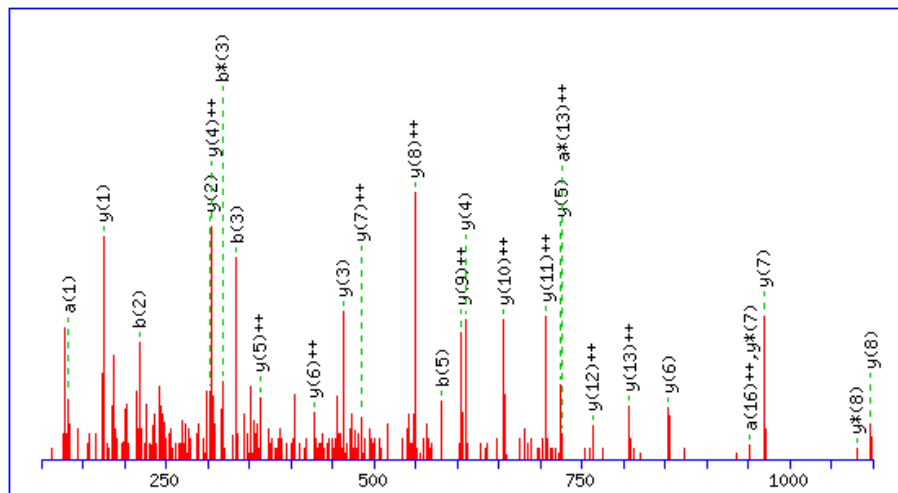


#	a	a ⁺⁺	a [*]	a ⁺⁺ *	b	b ⁺⁺	b [*]	b ⁺⁺ *	Seq.	y	y ⁺⁺	y [*]	y ⁺⁺ *	#
1	133.0430	67.0251			161.0379	81.0226			C					16
2	190.0645	95.5359			218.0594	109.5333			G	1790.7821	895.8947	1773.7556	887.3814	15
3	307.0957	154.0515	290.0691	145.5382	335.0906	168.0489	318.0640	159.5357	N	1733.7607	867.3840	1716.7341	858.8707	14
4	467.1263	234.0668	450.0998	225.5535	495.1212	248.0643	478.0947	239.5510	C	1616.7295	808.8684	1599.7029	800.3551	13
5	554.1583	277.5828	537.1318	269.0695	582.1533	291.5803	565.1267	283.0670	S	1456.6988	728.8530	1439.6723	720.3398	12
6	667.2424	334.1248	650.2159	325.6116	695.2373	348.1223	678.2108	339.6090	L	1369.6668	685.3370	1352.6402	676.8238	11
7	768.2901	384.6487	751.2635	376.1354	796.2850	398.6461	779.2584	390.1329	T	1256.5827	628.7950	1239.5562	620.2817	10
8	869.3378	435.1725	852.3112	426.6592	897.3327	449.1700	880.3061	440.6567	T	1155.5351	578.2712	1138.5085	569.7579	9
9	982.4218	491.7146	965.3953	483.2013	1010.4167	505.7120	993.3902	497.1987	L	1054.4874	527.7473	1037.4608	519.2341	8
10	1110.5168	555.7620	1093.4902	547.2488	1138.5117	569.7595	1121.4852	561.2462	K	941.4033	471.2053	924.3768	462.6920	7
11	1225.5437	613.2755	1208.5172	604.7622	1253.5386	627.2730	1236.5121	618.7597	D	813.3083	407.1578	796.2818	398.6445	6
12	1354.5863	677.7968	1337.5598	669.2835	1382.5812	691.7943	1365.5547	683.2810	E	698.2814	349.6443	681.2549	341.1311	5
13	1469.6133	735.3103	1452.5867	726.7970	1497.6082	749.3077	1480.5816	740.7945	D	569.2388	285.1230	552.2123	276.6098	4
14	1616.6817	808.8445	1599.6551	800.3312	1644.6766	822.8419	1627.6500	814.3287	F	454.2119	227.6096	437.1853	219.0963	3
15	1776.7123	888.8598	1759.6858	880.3465	1804.7072	902.8573	1787.6807	894.3440	C	307.1435	154.0754	290.1169	145.5621	2
16									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of CGNCSLTTLKDEDFCKR

Found in gi|62530391 in Ref_human, selenoprotein P isoform 1 precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)



#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	133.0430	67.0251			161.0379	81.0226			C					17
2	190.0645	95.5359			218.0594	109.5333			G	1946.8832	973.9453	1929.8567	965.4320	16
3	307.0957	154.0515	290.0691	145.5382	335.0906	168.0489	318.0640	159.5357	N	1889.8618	945.4345	1872.8352	936.9212	15
4	467.1263	234.0668	450.0998	225.5535	495.1212	248.0643	478.0947	239.5510	C	1772.8306	886.9189	1755.8040	878.4057	14
5	554.1583	277.5828	537.1318	269.0695	582.1533	291.5803	565.1267	283.0670	S	1612.7999	806.9036	1595.7734	798.3903	13
6	667.2424	334.1248	650.2159	325.6116	695.2373	348.1223	678.2108	339.6090	L	1525.7679	763.3876	1508.7414	754.8743	12
7	768.2901	384.6487	751.2635	376.1354	796.2850	398.6461	779.2584	390.1329	T	1412.6838	706.8456	1395.6573	698.3323	11
8	869.3378	435.1725	852.3112	426.6592	897.3327	449.1700	880.3061	440.6567	T	1311.6362	656.3217	1294.6096	647.8084	10
9	982.4218	491.7146	965.3953	483.2013	1010.4167	505.7120	993.3902	497.1987	L	1210.5885	605.7979	1193.5619	597.2846	9
10	1110.5168	555.7620	1093.4902	547.2488	1138.5117	569.7595	1121.4852	561.2462	K	1097.5044	549.2558	1080.4779	540.7426	8
11	1225.5437	613.2755	1208.5172	604.7622	1253.5386	627.2730	1236.5121	618.7597	D	969.4095	485.2084	952.3829	476.6951	7
12	1354.5863	677.7968	1337.5598	669.2835	1382.5812	691.7943	1365.5547	683.2810	E	854.3825	427.6949	837.3560	419.1816	6
13	1469.6133	735.3103	1452.5867	726.7970	1497.6082	749.3077	1480.5816	740.7945	D	725.3399	363.1736	708.3134	354.6603	5
14	1616.6817	808.8445	1599.6551	800.3312	1644.6766	822.8419	1627.6500	814.3287	F	610.3130	305.6601	593.2864	297.1469	4
15	1776.7123	888.8598	1759.6858	880.3465	1804.7072	902.8573	1787.6807	894.3440	C	463.2446	232.1259	446.2180	223.6126	3
16	1904.8073	952.9073	1887.7807	944.3940	1932.8022	966.9047	1915.7757	958.3915	K	303.2139	152.1106	286.1874	143.5973	2
17									R	175.1190	88.0631	158.0924	79.5498	1

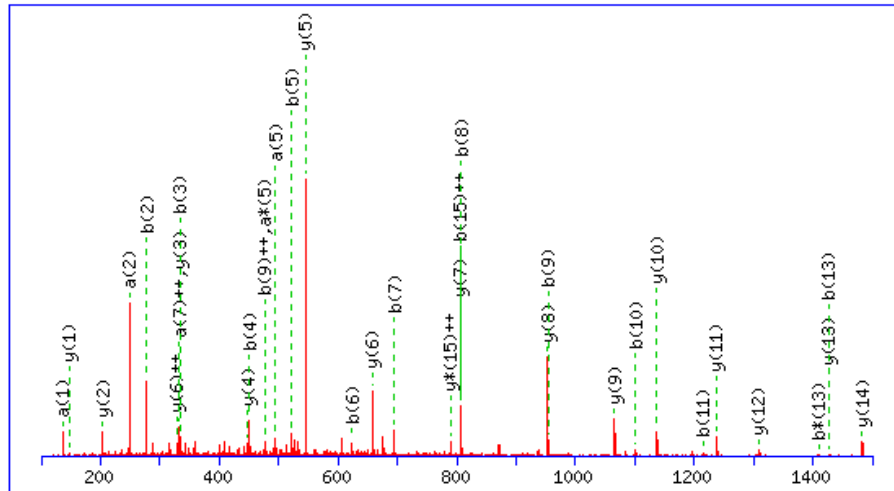
SERPINA1

1

MS/MS Fragmentation of YLGNATAIFFLPDEGK

Found in gi|50363217 in Ref_human, alpha-1-antitrypsin precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)



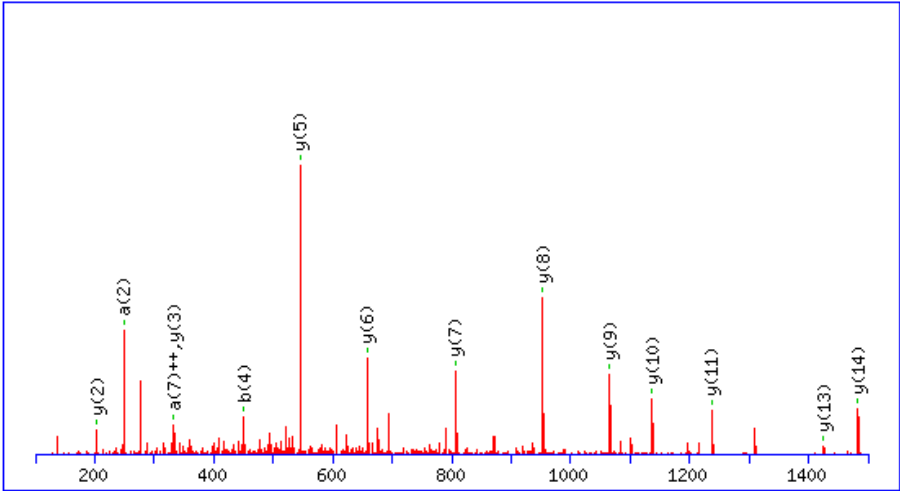
#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	136.0757	68.5415			164.0706	82.5389			Y					16
2	249.1598	125.0835			277.1547	139.0810			L	1595.8201	798.4137	1578.7936	789.9004	15
3	306.1812	153.5942			334.1761	167.5917			G	1482.7361	741.8717	1465.7095	733.3584	14
4	423.2124	212.1098	406.1859	203.5966	451.2073	226.1073	434.1808	217.5940	N	1425.7146	713.3609	1408.6881	704.8477	13
5	494.2495	247.6284	477.2230	239.1151	522.2444	261.6259	505.2179	253.1126	A	1308.6834	654.8454	1291.6569	646.3321	12
6	595.2972	298.1522	578.2707	289.6390	623.2921	312.1497	606.2656	303.6364	T	1237.6463	619.3268	1220.6198	610.8135	11
7	666.3343	333.6708	649.3078	325.1575	694.3292	347.6683	677.3027	339.1550	A	1136.5986	568.8030	1119.5721	560.2897	10
8	779.4184	390.2128	762.3918	381.6996	807.4133	404.2103	790.3867	395.6970	I	1065.5615	533.2844	1048.5350	524.7711	9
9	926.4868	463.7470	909.4602	455.2338	954.4817	477.7445	937.4552	469.2312	F	952.4775	476.7424	935.4509	468.2291	8
10	1073.5552	537.2812	1056.5287	528.7680	1101.5501	551.2787	1084.5236	542.7654	F	805.4090	403.2082	788.3825	394.6949	7
11	1186.6393	593.8233	1169.6127	585.3100	1214.6342	607.8207	1197.6076	599.3075	L	658.3406	329.6740	641.3141	321.1607	6
12	1283.6920	642.3497	1266.6655	633.8364	1311.6869	656.3471	1294.6604	647.8338	P	545.2566	273.1319	528.2300	264.6186	5
13	1398.7190	699.8631	1381.6924	691.3499	1426.7139	713.8606	1409.6873	705.3473	D	448.2038	224.6055	431.1773	216.0923	4
14	1527.7616	764.3844	1510.7350	755.8711	1555.7565	778.3819	1538.7299	769.8686	E	333.1769	167.0921	316.1503	158.5788	3
15	1584.7830	792.8952	1567.7565	784.3819	1612.7779	806.8926	1595.7514	798.3793	G	204.1343	102.5708	187.1077	94.0575	2
16									K	147.1128	74.0600	130.0863	65.5468	1

SERPINA1

2

MS/MS Fragmentation of YLGNATAIFFLPDEGK
Found in gi|50363217 in Ref_human, alpha-1-antitrypsin precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

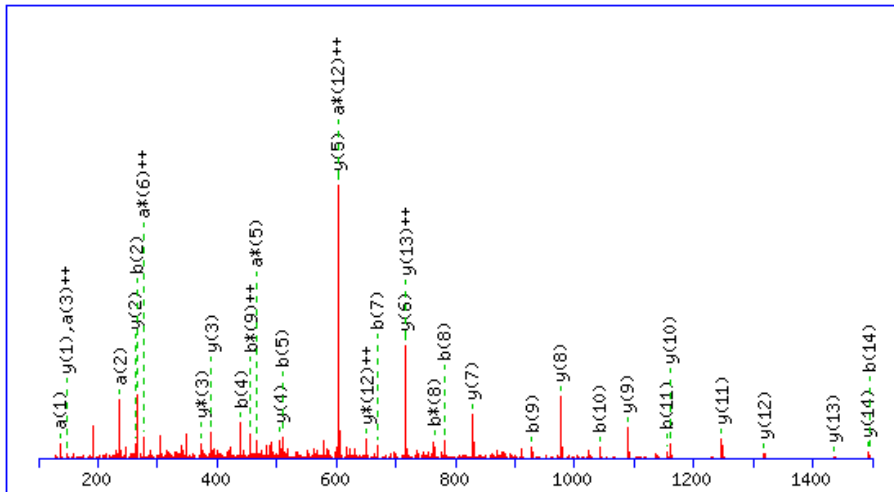


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	136.0757	68.5415			164.0706	82.5389			Y					16
2	249.1598	125.0835			277.1547	139.0810			L	1595.8201	798.4137	1578.7936	789.9004	15
3	306.1812	153.5942			334.1761	167.5917			G	1482.7361	741.8717	1465.7095	733.3584	14
4	423.2124	212.1098	406.1859	203.5966	451.2073	226.1073	434.1808	217.5940	N	1425.7146	713.3609	1408.6881	704.8477	13
5	494.2495	247.6284	477.2230	239.1151	522.2444	261.6259	505.2179	253.1126	A	1308.6834	654.8454	1291.6569	646.3321	12
6	595.2972	298.1522	578.2707	289.6390	623.2921	312.1497	606.2656	303.6364	T	1237.6463	619.3268	1220.6198	610.8135	11
7	666.3343	333.6708	649.3078	325.1575	694.3292	347.6683	677.3027	339.1550	A	1136.5986	568.8030	1119.5721	560.2897	10
8	779.4184	390.2128	762.3918	381.6996	807.4133	404.2103	790.3867	395.6970	I	1065.5615	533.2844	1048.5350	524.7711	9
9	926.4868	463.7470	909.4602	455.2338	954.4817	477.7445	937.4552	469.2312	F	952.4775	476.7424	935.4509	468.2291	8
10	1073.5552	537.2812	1056.5287	528.7680	1101.5501	551.2787	1084.5236	542.7654	F	805.4090	403.2082	788.3825	394.6949	7
11	1186.6393	593.8233	1169.6127	585.3100	1214.6342	607.8207	1197.6076	599.3075	L	658.3406	329.6740	641.3141	321.1607	6
12	1283.6920	642.3497	1266.6655	633.8364	1311.6869	656.3471	1294.6604	647.8338	P	545.2566	273.1319	528.2300	264.6186	5
13	1398.7190	699.8631	1381.6924	691.3499	1426.7139	713.8606	1409.6873	705.3473	D	448.2038	224.6055	431.1773	216.0923	4
14	1527.7616	764.3844	1510.7350	755.8711	1555.7565	778.3819	1538.7299	769.8686	E	333.1769	167.0921	316.1503	158.5788	3
15	1584.7830	792.8952	1567.7565	784.3819	1612.7779	806.8926	1595.7514	798.3793	G	204.1343	102.5708	187.1077	94.0575	2
16									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of YTGNASALFILPDQDK

Found in gi|50659080 in Ref_human, alpha-1-antichymotrypsin precursor [Homo sapiens]

Sample: HepG2 medium AAL(+)

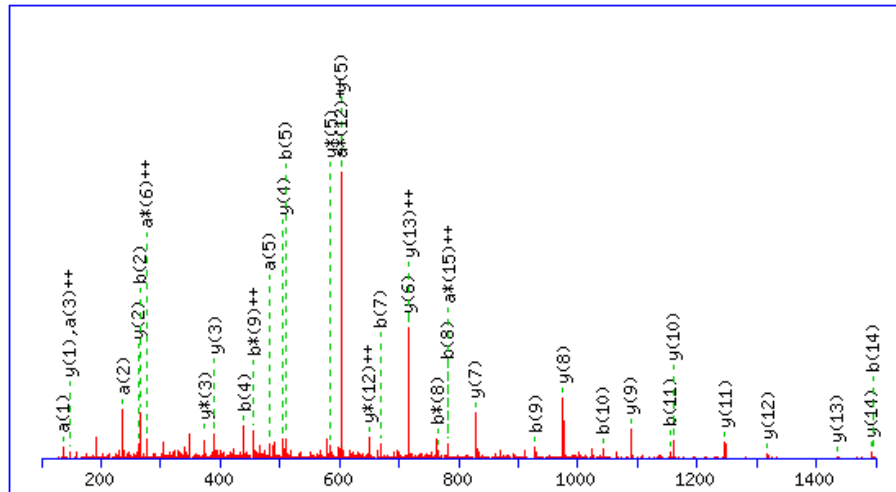


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	136.0757	68.5415			164.0706	82.5389			Y					16
2	237.1234	119.0653			265.1183	133.0628			T	1592.8052	796.9063	1575.7787	788.3930	15
3	294.1448	147.5761			322.1397	161.5735			G	1491.7575	746.3824	1474.7310	737.8691	14
4	411.1760	206.0916	394.1495	197.5784	439.1709	220.0891	422.1444	211.5758	N	1434.7361	717.8717	1417.7095	709.3584	13
5	482.2131	241.6102	465.1866	233.0969	510.2081	255.6077	493.1815	247.0944	A	1317.7049	659.3561	1300.6783	650.8428	12
6	569.2452	285.1262	552.2186	276.6129	597.2401	299.1237	580.2135	290.6104	S	1246.6678	623.8375	1229.6412	615.3243	11
7	640.2823	320.6448	623.2557	312.1315	668.2772	334.6422	651.2506	326.1290	A	1159.6358	580.3215	1142.6092	571.8082	10
8	753.3663	377.1868	736.3398	368.6735	781.3613	391.1843	764.3347	382.6710	L	1088.5986	544.8030	1071.5721	536.2897	9
9	900.4348	450.7210	883.4082	442.2077	928.4297	464.7185	911.4031	456.2052	F	975.5146	488.2609	958.4880	479.7477	8
10	1013.5188	507.2630	996.4923	498.7498	1041.5137	521.2605	1024.4872	512.7472	I	828.4462	414.7267	811.4196	406.2134	7
11	1126.6029	563.8051	1109.5763	555.2918	1154.5978	577.8025	1137.5712	569.2893	L	715.3621	358.1847	698.3355	349.6714	6
12	1223.6556	612.3315	1206.6291	603.8182	1251.6506	626.3289	1234.6240	617.8156	P	602.2780	301.6427	585.2515	293.1294	5
13	1338.6826	669.8449	1321.6560	661.3317	1366.6775	683.8424	1349.6510	675.3291	D	505.2253	253.1163	488.1987	244.6030	4
14	1466.7412	733.8742	1449.7146	725.3609	1494.7361	747.8717	1477.7095	739.3584	Q	390.1983	195.6028	373.1718	187.0895	3
15	1581.7681	791.3877	1564.7416	782.8744	1609.7630	805.3852	1592.7365	796.8719	D	262.1397	131.5735	245.1132	123.0602	2
16									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of YTGNASALFILPDQDK

Found in gi|50659080 in Ref_human, alpha-1-antichymotrypsin precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

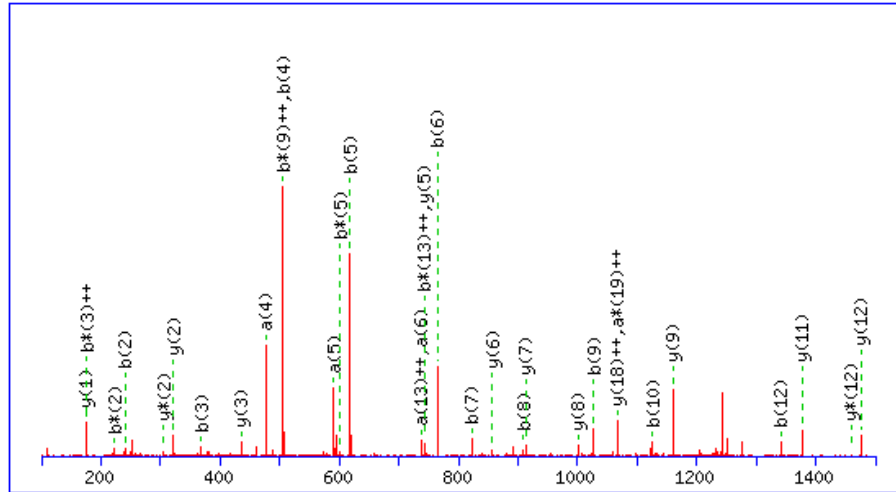


#	a	a ⁺⁺	a ⁺	a ⁺⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	#
1	136.0757	68.5415			164.0706	82.5389			Y					16
2	237.1234	119.0653			265.1183	133.0628			T	1592.8052	796.9063	1575.7787	788.3930	15
3	294.1448	147.5761			322.1397	161.5735			G	1491.7575	746.3824	1474.7310	737.8691	14
4	411.1760	206.0916	394.1495	197.5784	439.1709	220.0891	422.1444	211.5758	N	1434.7361	717.8717	1417.7095	709.3584	13
5	482.2131	241.6102	465.1866	233.0969	510.2081	255.6077	493.1815	247.0944	A	1317.7049	659.3561	1300.6783	650.8428	12
6	569.2452	285.1262	552.2186	276.6129	597.2401	299.1237	580.2135	290.6104	S	1246.6678	623.8375	1229.6412	615.3243	11
7	640.2823	320.6448	623.2557	312.1315	668.2772	334.6422	651.2506	326.1290	A	1159.6358	580.3215	1142.6092	571.8082	10
8	753.3663	377.1868	736.3398	368.6735	781.3613	391.1843	764.3347	382.6710	L	1088.5986	544.8030	1071.5721	536.2897	9
9	900.4348	450.7210	883.4082	442.2077	928.4297	464.7185	911.4031	456.2052	F	975.5146	488.2609	958.4880	479.7477	8
10	1013.5188	507.2630	996.4923	498.7498	1041.5137	521.2605	1024.4872	512.7472	I	828.4462	414.7267	811.4196	406.2134	7
11	1126.6029	563.8051	1109.5763	555.2918	1154.5978	577.8025	1137.5712	569.2893	L	715.3621	358.1847	698.3355	349.6714	6
12	1223.6556	612.3315	1206.6291	603.8182	1251.6506	626.3289	1234.6240	617.8156	P	602.2780	301.6427	585.2515	293.1294	5
13	1338.6826	669.8449	1321.6560	661.3317	1366.6775	683.8424	1349.6510	675.3291	D	505.2253	253.1163	488.1987	244.6030	4
14	1466.7412	733.8742	1449.7146	725.3609	1494.7361	747.8717	1477.7095	739.3584	Q	390.1983	195.6028	373.1718	187.0895	3
15	1581.7681	791.3877	1564.7416	782.8744	1609.7630	805.3852	1592.7365	796.8719	D	262.1397	131.5735	245.1132	123.0602	2
16									K	147.1128	74.0600	130.0863	65.5468	1

MS/MS Fragmentation of QQQHLFGSNVTDCSGNFCLFR

Found in gi|4557871 in Ref_human, serotransferrin precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)

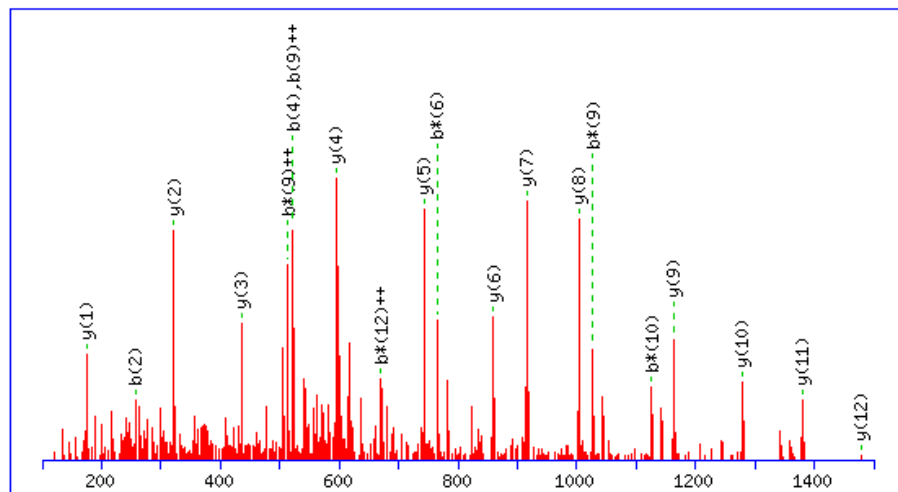


#	a	a ⁺⁺	a ⁺	a ⁺⁺	b	b ⁺⁺	b ⁺	b ⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺	#
1	84.0444	42.5258	67.0178	34.0126	112.0393	56.5233	95.0128	48.0100	Q					21
2	212.1030	106.5551	195.0764	98.0418	240.0979	120.5526	223.0713	112.0393	Q	2390.0538	1195.5305	2373.0273	1187.0173	20
3	340.1615	170.5844	323.1350	162.0711	368.1565	184.5819	351.1299	176.0686	Q	2261.9952	1131.5013	2244.9687	1122.9880	19
4	477.2205	239.1139	460.1939	230.6006	505.2154	253.1113	488.1888	244.5980	H	2133.9367	1067.4720	2116.9101	1058.9587	18
5	590.3045	295.6559	573.2780	287.1426	618.2994	309.6534	601.2729	301.1401	L	1996.8778	998.9425	1979.8512	990.4292	17
6	737.3729	369.1901	720.3464	360.6768	765.3679	383.1876	748.3413	374.6743	F	1883.7937	942.4005	1866.7671	933.8872	16
7	794.3944	397.7008	777.3679	389.1876	822.3893	411.6983	805.3628	403.1850	G	1736.7253	868.8663	1719.6987	860.3530	15
8	881.4264	441.2169	864.3999	432.7036	909.4213	455.2143	892.3948	446.7010	S	1679.7038	840.3555	1662.6773	831.8423	14
9	998.4576	499.7324	981.4311	491.2192	1026.4525	513.7299	1009.4260	505.2166	N	1592.6718	796.8395	1575.6452	788.3263	13
10	1097.5260	549.2667	1080.4995	540.7534	1125.5209	563.2641	1108.4944	554.7508	V	1475.6406	738.3239	1458.6140	729.8107	12
11	1198.5737	599.7905	1181.5472	591.2772	1226.5686	613.7880	1209.5421	605.2747	T	1376.5722	688.7897	1359.5456	680.2765	11
12	1313.6007	657.3040	1296.5741	648.7907	1341.5956	671.3014	1324.5690	662.7881	D	1275.5245	638.2659	1258.4980	629.7526	10
13	1473.6313	737.3193	1456.6048	728.8060	1501.6262	751.3167	1484.5997	742.8035	C	1160.4976	580.7524	1143.4710	572.2391	9
14	1560.6633	780.8353	1543.6368	772.3220	1588.6582	794.8328	1571.6317	786.3195	S	1000.4669	500.7371	983.4404	492.2238	8
15	1617.6848	809.3460	1600.6582	800.8328	1645.6797	823.3435	1628.6532	814.8302	G	913.4349	457.2211	896.4083	448.7078	7
16	1731.7277	866.3675	1714.7012	857.8542	1759.7226	880.3650	1742.6961	871.8517	N	856.4134	428.7103	839.3869	420.1971	6
17	1878.7961	939.9017	1861.7696	931.3884	1906.7910	953.8992	1889.7645	945.3859	F	742.3705	371.6889	725.3439	363.1756	5
18	2038.8268	1019.9170	2021.8002	1011.4038	2066.8217	1033.9145	2049.7951	1025.4012	C	595.3021	298.1547	578.2755	289.6414	4
19	2151.9108	1076.4591	2134.8843	1067.9458	2179.9058	1090.4565	2162.8792	1081.9432	L	435.2714	218.1394	418.2449	209.6261	3
20	2298.9793	1149.9933	2281.9527	1141.4800	2326.9742	1163.9907	2309.9476	1155.4775	F	322.1874	161.5973	305.1608	153.0840	2
21									R	175.1190	88.0631	158.0924	79.5498	1

MS/MS Fragmentation of QQQHLFGSNVTDCSGNFCLFR

Found in gi|4557871 in Ref_human, serotransferrin precursor [Homo sapiens]

Sample: HCC patient serum AAL(+)



#	a	a ⁺⁺	a [*]	a ⁺⁺	b	b ⁺⁺	b [*]	b ⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ⁺⁺	#
1	101.0709	51.0391	84.0444	42.5258	129.0659	65.0366	112.0393	56.5233	Q					21
2	229.1295	115.0684	212.1030	106.5551	257.1244	129.0659	240.0979	120.5526	Q	2393.0421	1197.0247	2376.0155	1188.5114	20
3	357.1881	179.0977	340.1615	170.5844	385.1830	193.0951	368.1565	184.5819	Q	2264.9835	1132.9954	2247.9570	1124.4821	19
4	494.2470	247.6271	477.2205	239.1139	522.2419	261.6246	505.2154	253.1113	H	2136.9249	1068.9661	2119.8984	1060.4528	18
5	607.3311	304.1692	590.3045	295.6559	635.3260	318.1666	618.2994	309.6534	L	1999.8660	1000.4366	1982.8395	991.9234	17
6	754.3995	377.7034	737.3729	369.1901	782.3944	391.7008	765.3679	383.1876	F	1886.7820	943.8946	1869.7554	935.3813	16
7	811.4209	406.2141	794.3944	397.7008	839.4159	420.2116	822.3893	411.6983	G	1739.7135	870.3604	1722.6870	861.8471	15
8	898.4530	449.7301	881.4264	441.2169	926.4479	463.7276	909.4213	455.2143	S	1682.6921	841.8497	1665.6655	833.3364	14
9	1015.4842	508.2457	998.4576	499.7324	1043.4791	522.2432	1026.4525	513.7299	N	1595.6600	798.3337	1578.6335	789.8204	13
10	1114.5526	557.7799	1097.5260	549.2667	1142.5475	571.7774	1125.5209	563.2641	V	1478.6289	739.8181	1461.6023	731.3048	12
11	1215.6003	608.3038	1198.5737	599.7905	1243.5952	622.3012	1226.5686	613.7880	T	1379.5604	690.2839	1362.5339	681.7706	11
12	1330.6272	665.8172	1313.6007	657.3040	1358.6221	679.8147	1341.5956	671.3014	D	1278.5128	639.7600	1261.4862	631.2467	10
13	1490.6579	745.8326	1473.6313	737.3193	1518.6528	759.8300	1501.6262	751.3167	C	1163.4858	582.2465	1146.4593	573.7333	9
14	1577.6899	789.3486	1560.6633	780.8353	1605.6848	803.3460	1588.6582	794.8328	S	1003.4552	502.2312	986.4286	493.7179	8
15	1634.7113	817.8593	1617.6848	809.3460	1662.7063	831.8568	1645.6797	823.3435	G	916.4231	458.7152	899.3966	450.2019	7
16	1751.7425	876.3749	1734.7160	867.8616	1779.7374	890.3724	1762.7109	881.8591	N	859.4017	430.2045	842.3751	421.6912	6
17	1898.8109	949.9091	1881.7844	941.3958	1926.8059	963.9066	1909.7793	955.3933	F	742.3705	371.6889	725.3439	363.1756	5
18	2058.8416	1029.9244	2041.8150	1021.4112	2086.8365	1043.9219	2069.8100	1035.4086	C	595.3021	298.1547	578.2755	289.6414	4
19	2171.9257	1086.4665	2154.8991	1077.9532	2199.9206	1100.4639	2182.8940	1091.9506	L	435.2714	218.1394	418.2449	209.6261	3
20	2318.9941	1160.0007	2301.9675	1151.4874	2346.9890	1173.9981	2329.9624	1165.4849	F	322.1874	161.5973	305.1608	153.0840	2
21									R	175.1190	88.0631	158.0924	79.5498	1