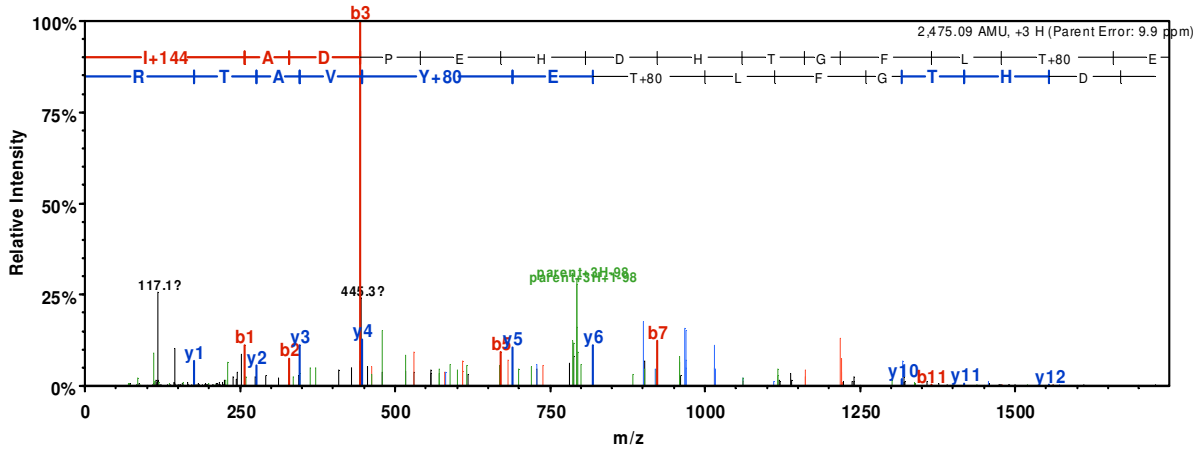
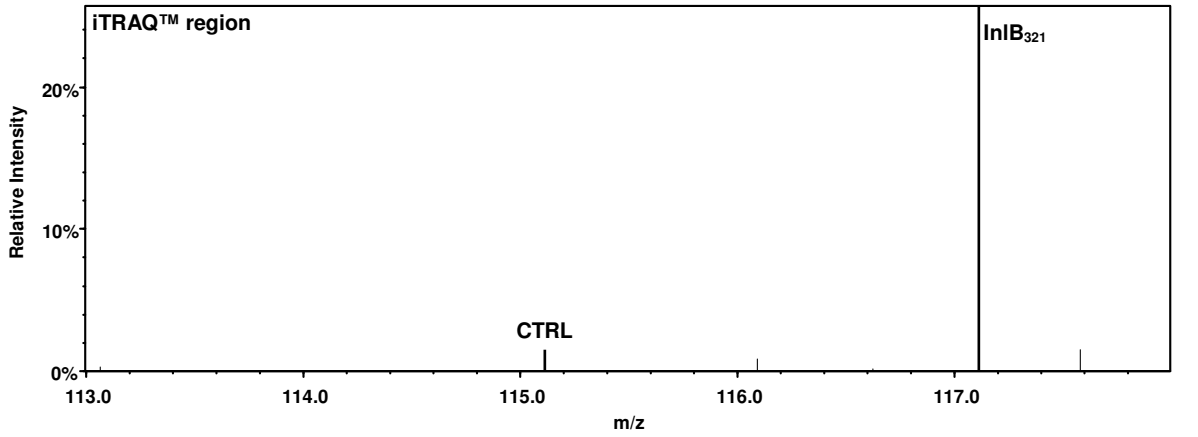
Supplementary Data S5 (Reinl et al, 2009)

Content:

A. Representative fragmentation spectra and mass tables of $InlB_{321}$ regulated phosphopeptides from protein kinases according to table 1.

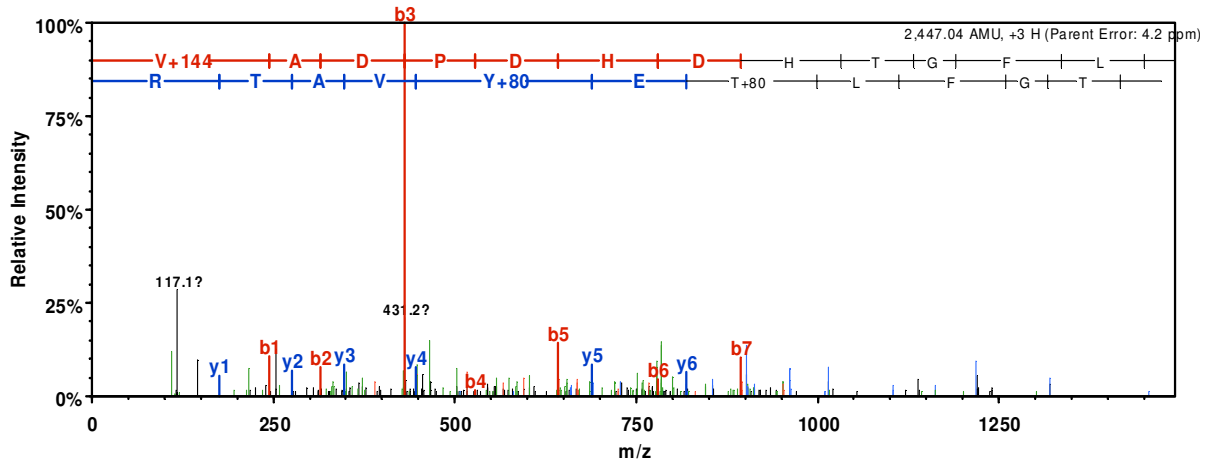
MK03_HUMAN: IADPEHDHTGFLpTEpYVATR

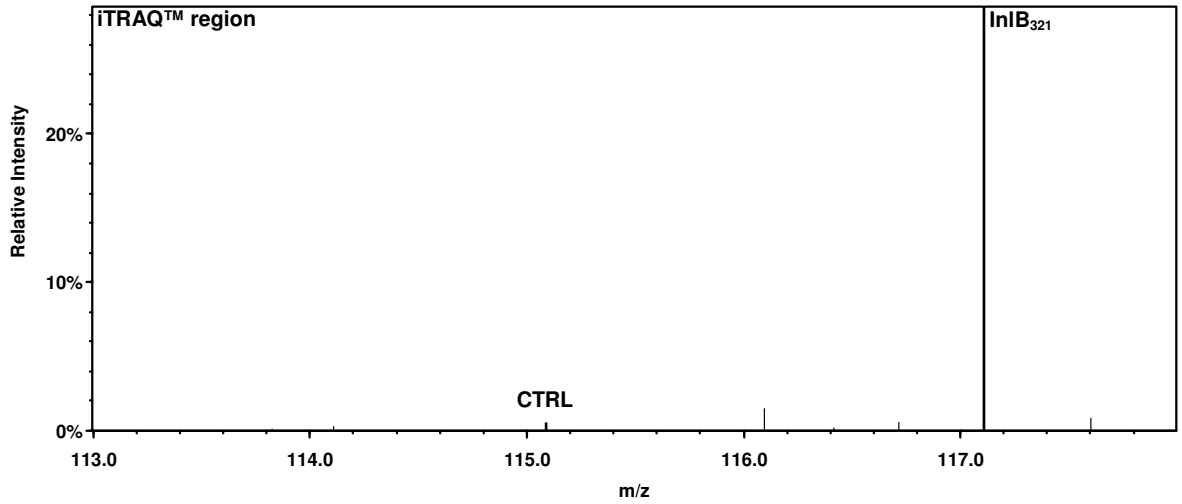




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				I+144	2,476.1	1,238.5	2,459.0	2,458.1	19
2	329.2				A	2,218.9	1,109.9	2,201.9	2,200.9	18
3	444.3			426.2	D	2,147.8	1,074.4	2,130.8	2,129.8	17
4	541.3			523.3	P	2,032.8	1,016.9	2,015.8	2,014.8	16
5	670.4			652.3	E	1,935.8	968.4	1,918.7	1,917.8	15
6	807.4	404.2		789.4	H	1,806.7	903.9	1,789.7	1,788.7	14
7	922.4	461.7		904.4	D	1,669.7	835.3	1,652.6	1,651.7	13
8	1,059.5	530.3		1,041.5	H	1,554.6	777.8	1,537.6	1,536.6	12
9	1,160.5	580.8		1,142.5	T	1,417.6	709.3	1,400.6	1,399.6	11
10	1,217.6	609.3		1,199.6	G	1,316.5	658.8	1,299.5	1,298.5	10
11	1,364.6	682.8		1,346.6	F	1,259.5	630.3	1,242.5	1,241.5	9
12	1,477.7	739.4		1,459.7	L	1,112.4	556.7	1,095.4	1,094.4	8
13	1,658.7	829.9		1,640.7	T+80	999.4	500.2	982.3	981.3	7
14	1,787.8	894.4		1,769.8	E	818.3	409.7	801.3	800.3	6
15	2,030.8	1,015.9		2,012.8	Y+80	689.3		672.3	671.3	5
16	2,129.9	1,065.4		2,111.9	V	446.3		429.2	428.3	4
17	2,200.9	1,101.0		2,182.9	A	347.2		330.2	329.2	3
18	2,302.0	1,151.5		2,283.9	T	276.2		259.1	258.2	2
19	2,476.1	1,238.5	2,459.0	2,458.1	R	175.1		158.1		1

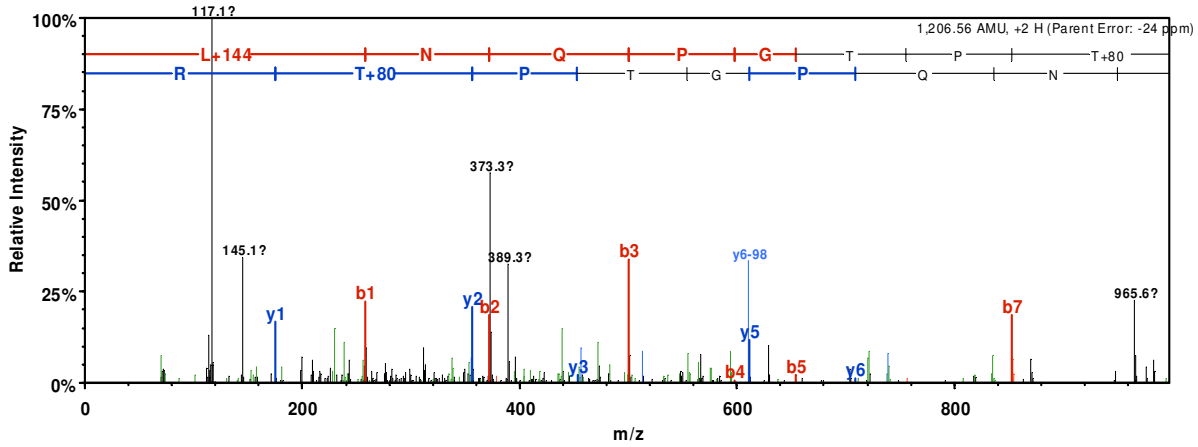
MK01_HUMAN: VADPDHDHTGFLpTEpYVATR

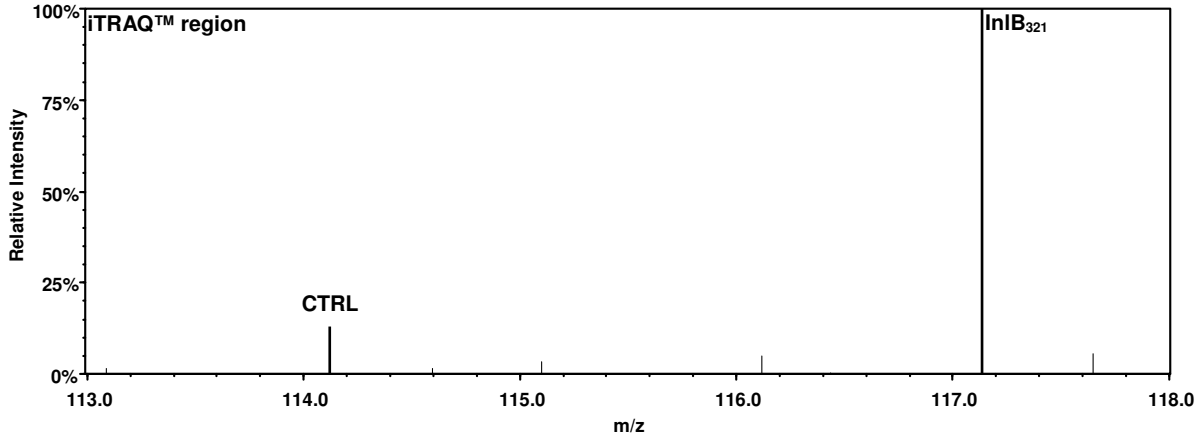




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	2,448.0	1,224.5	2,431.0	2,430.0	19
2	315.2				A	2,204.9	1,102.9	2,187.8	2,186.9	18
3	430.2			412.2	D	2,133.8	1,067.4	2,116.8	2,115.8	17
4	527.3			509.3	P	2,018.8	1,009.9	2,001.8	2,000.8	16
5	642.3			624.3	D	1,921.8	961.4	1,904.7	1,903.7	15
6	779.4	390.2		761.4	H	1,806.7	903.9	1,789.7	1,788.7	14
7	894.4	447.7		876.4	D	1,669.7	835.3	1,652.6	1,651.7	13
8	1,031.5	516.2		1,013.5	H	1,554.6	777.8	1,537.6	1,536.6	12
9	1,132.5	566.8		1,114.5	T	1,417.6	709.3	1,400.6	1,399.6	11
10	1,189.5	595.3		1,171.5	G	1,316.5	658.8	1,299.5	1,298.5	10
11	1,336.6	668.8		1,318.6	F	1,259.5	630.3	1,242.5	1,241.5	9
12	1,449.7	725.3		1,431.7	L	1,112.4	556.7	1,095.4	1,094.4	8
13	1,630.7	815.9		1,612.7	T+80	999.4	500.2	982.3	981.3	7
14	1,759.7	880.4		1,741.7	E	818.3	409.7	801.3	800.3	6
15	2,002.8	1,001.9		1,984.8	Y+80	689.3		672.3	671.3	5
16	2,101.8	1,051.4		2,083.8	V	446.3		429.2	428.3	4
17	2,172.9	1,086.9		2,154.9	A	347.2		330.2	329.2	3
18	2,273.9	1,137.5		2,255.9	T	276.2		259.1	258.2	2
19	2,448.0	1,224.5	2,431.0	2,430.0	R	175.1		158.1		1

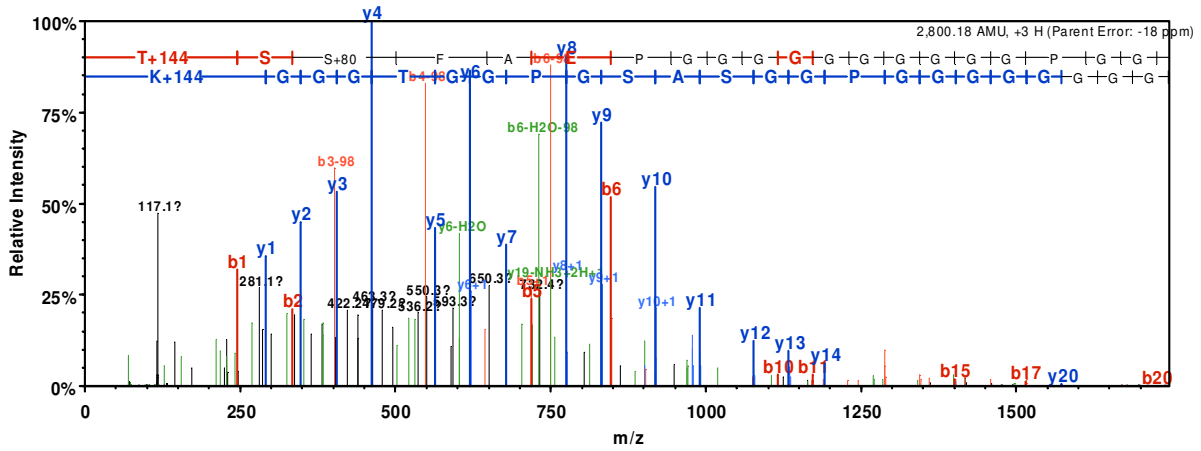
MP2K2_HUMAN: LNQPGTPpTR

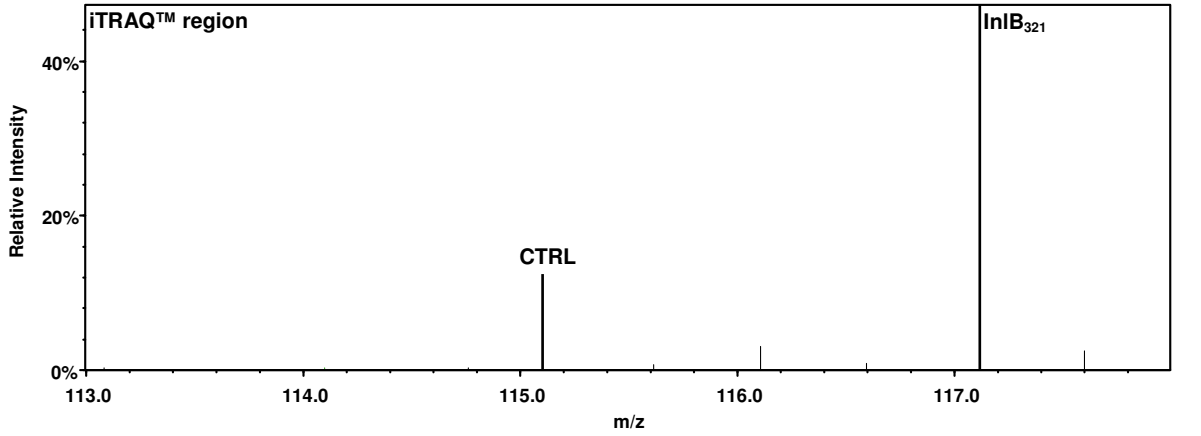




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				L+144	1,207.6	604.3	1,190.6	1,189.6	9
2	372.2		355.2		N	950.4	475.7	933.4	932.4	8
3	500.3		483.3		Q	836.4	418.7	819.3	818.4	7
4	597.3		580.3		P	708.3	354.7	691.3	690.3	6
5	654.4		637.3		G	611.3		594.2	593.2	5
6	755.4	378.2	738.4	737.4	T	554.2		537.2	536.2	4
7	852.5	426.7	835.4	834.5	P	453.2		436.2	435.2	3
8	1,033.5	517.2	1,016.5	1,015.5	T+80	356.1		339.1	338.1	2
9	1,207.6	604.3	1,190.6	1,189.6	R	175.1		158.1		1

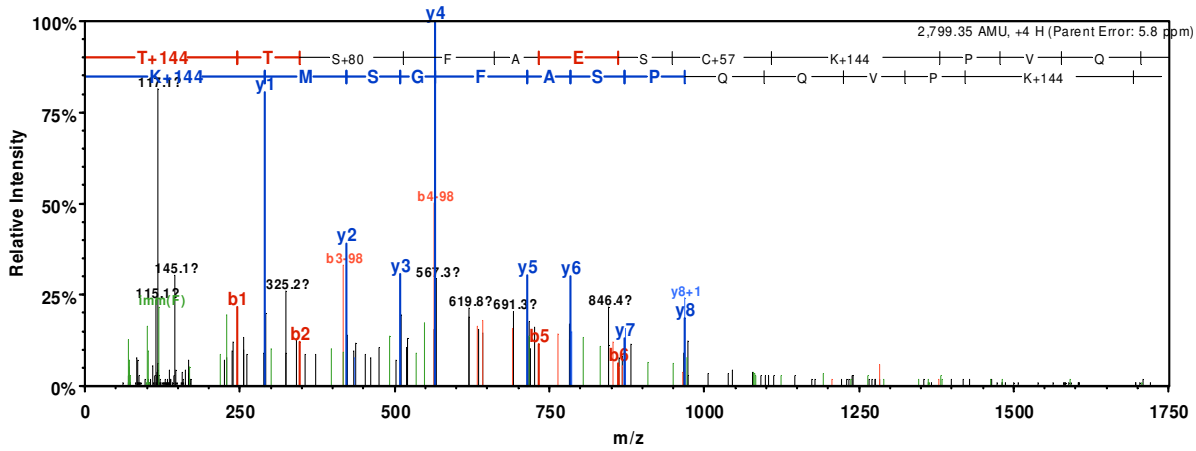
GSK3A_HUMAN: TSpSFAEPGGGGGGGGGGPGGSASGPGGTGGGK

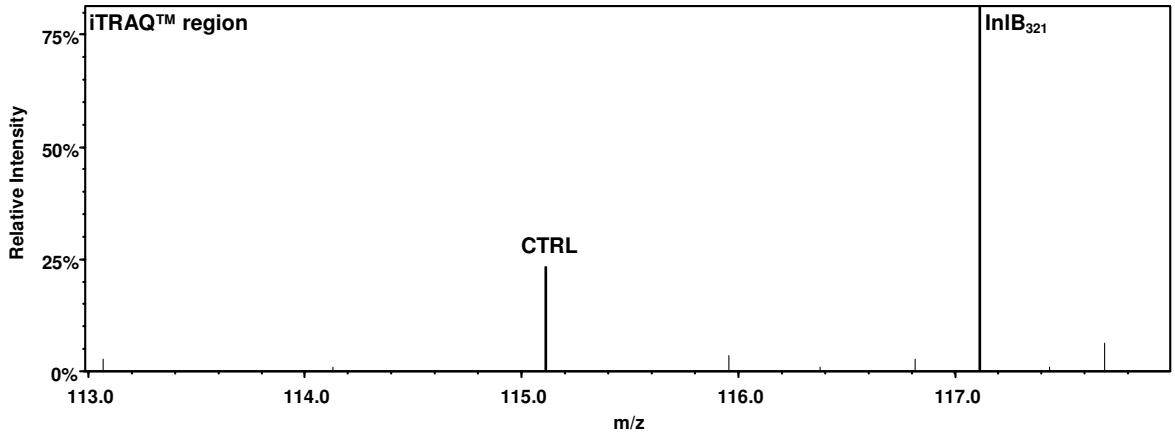




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	246.2			228.1	T+144	2,801.2	1,401.1	2,784.2	2,783.2	32
2	333.2			315.2	S	2,556.1	1,278.5	2,539.1	2,538.1	31
3	500.2			482.2	S+80	2,469.1	1,235.0	2,452.0	2,451.0	30
4	647.3			629.2	F	2,302.1	1,151.5	2,285.0	2,284.0	29
5	718.3			700.3	A	2,155.0	1,078.0	2,138.0	2,137.0	28
6	847.3	424.2		829.3	E	2,084.0	1,042.5	2,066.9	2,065.9	27
7	944.4	472.7		926.4	P	1,954.9	978.0	1,937.9	1,936.9	26
8	1,001.4	501.2		983.4	G	1,857.9	929.4	1,840.8	1,839.8	25
9	1,058.4	529.7		1,040.4	G	1,800.8	900.9	1,783.8	1,782.8	24
10	1,115.5	558.2		1,097.4	G	1,743.8	872.4	1,726.8	1,725.8	23
11	1,172.5	586.7		1,154.5	G	1,686.8	843.9	1,669.8	1,668.8	22
12	1,229.5	615.3		1,211.5	G	1,629.8	815.4	1,612.7	1,611.8	21
13	1,286.5	643.8		1,268.5	G	1,572.7	786.9	1,555.7	1,554.7	20
14	1,343.5	672.3		1,325.5	G	1,515.7	758.4	1,498.7	1,497.7	19
15	1,400.6	700.8		1,382.6	G	1,458.7	729.9	1,441.7	1,440.7	18
16	1,457.6	729.3		1,439.6	G	1,401.7	701.3	1,384.7	1,383.7	17
17	1,514.6	757.8		1,496.6	G	1,344.7	672.8	1,327.6	1,326.7	16
18	1,611.7	806.3		1,593.6	P	1,287.6	644.3	1,270.6	1,269.6	15
19	1,668.7	834.8		1,650.7	G	1,190.6	595.8	1,173.6	1,172.6	14
20	1,725.7	863.4		1,707.7	G	1,133.6	567.3	1,116.5	1,115.6	13
21	1,812.7	906.9		1,794.7	S	1,076.5	538.8	1,059.5	1,058.5	12
22	1,883.8	942.4		1,865.8	A	989.5	495.3	972.5	971.5	11
23	1,970.8	985.9		1,952.8	S	918.5	459.7	901.5	900.5	10
24	2,027.8	1,014.4		2,009.8	G	831.4	416.2	814.4	813.4	9
25	2,124.9	1,062.9		2,106.9	P	774.4	387.7	757.4	756.4	8
26	2,181.9	1,091.5		2,163.9	G	677.4	339.2	660.3	659.4	7
27	2,238.9	1,120.0		2,220.9	G	620.3	310.7	603.3	602.3	6
28	2,340.0	1,170.5		2,322.0	T	563.3		546.3	545.3	5
29	2,397.0	1,199.0		2,379.0	G	462.3		445.3		4
30	2,454.0	1,227.5		2,436.0	G	405.3		388.2		3
31	2,511.0	1,256.0		2,493.0	G	348.2		331.2		2
32	2,801.2	1,401.1	2,784.2	2,783.2	K+144	291.2		274.2		1

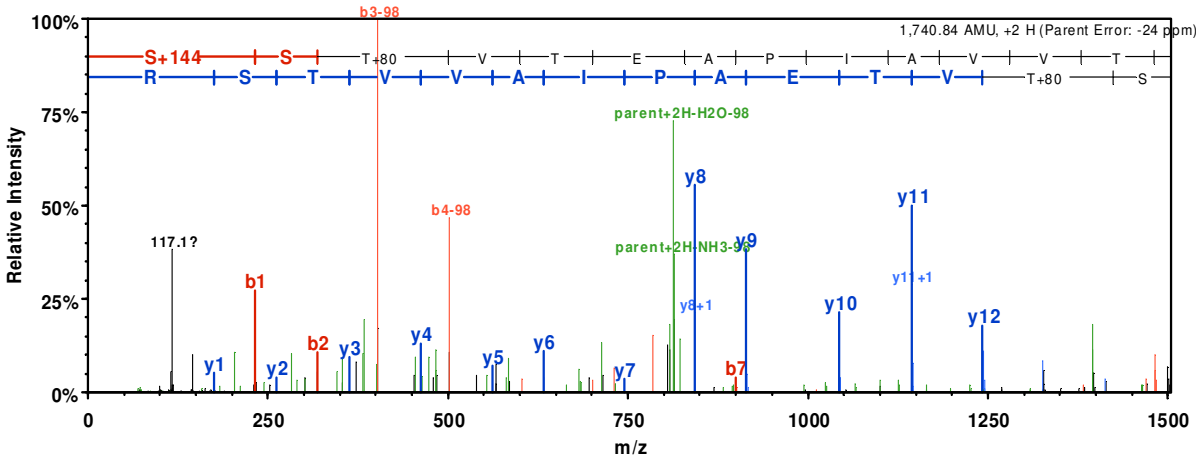
GSK3B_HUMAN: TTpSFAESCKPVQQPSAFGSMK

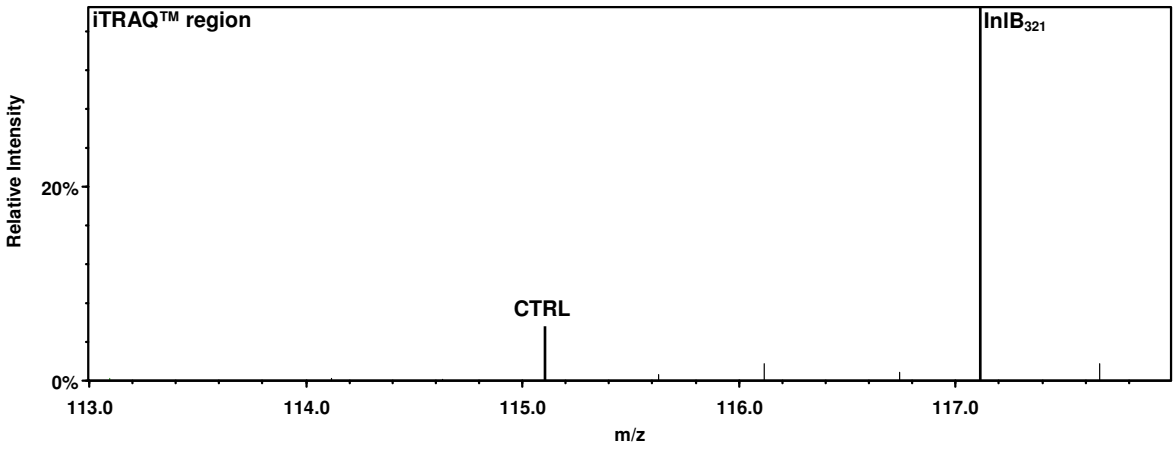




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	246.2			228.1	T+144	2,800.3	1,400.7	2,783.3	2,782.3	21
2	347.2			329.2	T	2,555.2	1,278.1	2,538.2	2,537.2	20
3	514.2			496.2	S+80	2,454.1	1,227.6	2,437.1	2,436.1	19
4	661.3			643.3	F	2,287.1	1,144.1	2,270.1	2,269.1	18
5	732.3			714.3	A	2,140.1	1,070.5	2,123.1	2,122.1	17
6	861.4	431.2		843.3	E	2,069.0	1,035.0	2,052.0	2,051.0	16
7	948.4	474.7		930.4	S	1,940.0	970.5	1,923.0	1,922.0	15
8	1,108.4	554.7		1,090.4	C+57	1,853.0	927.0	1,835.9	1,835.0	14
9	1,380.6	690.8	1,363.6	1,362.6	K+144	1,692.9	847.0	1,675.9	1,674.9	13
10	1,477.7	739.3	1,460.6	1,459.7	P	1,420.7	710.9	1,403.7	1,402.7	12
11	1,576.7	788.9	1,559.7	1,558.7	V	1,323.7	662.3	1,306.7	1,305.7	11
12	1,704.8	852.9	1,687.8	1,686.8	Q	1,224.6	612.8	1,207.6	1,206.6	10
13	1,832.8	916.9	1,815.8	1,814.8	Q	1,096.6	548.8	1,079.5	1,078.5	9
14	1,929.9	965.5	1,912.9	1,911.9	P	968.5	484.8	951.5	950.5	8
15	2,016.9	1,009.0	1,999.9	1,998.9	S	871.4	436.2	854.4	853.4	7
16	2,088.0	1,044.5	2,070.9	2,070.0	A	784.4	392.7	767.4	766.4	6
17	2,235.0	1,118.0	2,218.0	2,217.0	F	713.4		696.4	695.4	5
18	2,292.1	1,146.5	2,275.0	2,274.1	G	566.3		549.3	548.3	4
19	2,379.1	1,190.1	2,362.1	2,361.1	S	509.3		492.3	491.3	3
20	2,510.1	1,255.6	2,493.1	2,492.1	M	422.3		405.2		2
21	2,800.3	1,400.7	2,783.3	2,782.3	K+144	291.2		274.2		1

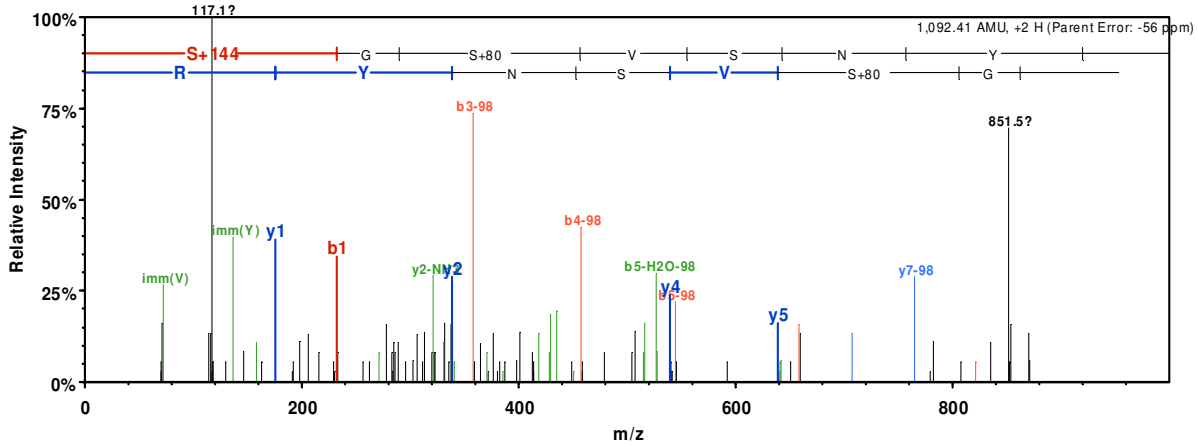
NEK9_HUMAN: SSpTVTEAPIAVVTSR

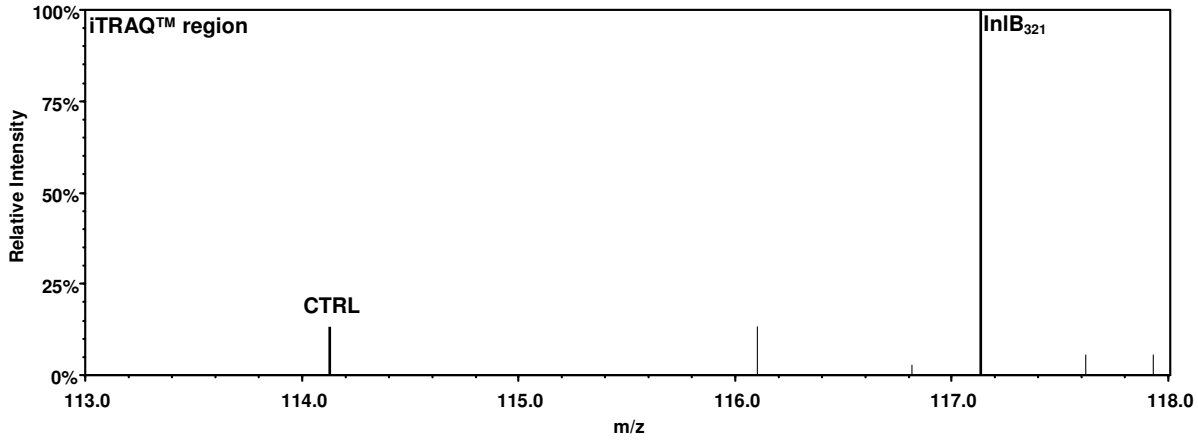




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,741.9	871.4	1,724.9	1,723.9	15
2	319.2			301.2	S	1,510.8	755.9	1,493.7	1,492.7	14
3	500.2			482.2	T+80	1,423.7	712.4	1,406.7	1,405.7	13
4	599.3			581.2	V	1,242.7	621.9	1,225.7	1,224.7	12
5	700.3			682.3	T	1,143.6	572.3	1,126.6	1,125.6	11
6	829.3	415.2		811.3	E	1,042.6	521.8	1,025.6	1,024.6	10
7	900.4	450.7		882.4	A	913.5	457.3	896.5	895.5	9
8	997.4	499.2		979.4	P	842.5	421.8	825.5	824.5	8
9	1,110.5	555.8		1,092.5	I	745.5	373.2	728.4	727.4	7
10	1,181.6	591.3		1,163.5	A	632.4	316.7	615.3	614.4	6
11	1,280.6	640.8		1,262.6	V	561.3		544.3	543.3	5
12	1,379.7	690.4		1,361.7	V	462.3		445.2	444.3	4
13	1,480.7	740.9		1,462.7	T	363.2		346.2	345.2	3
14	1,567.8	784.4		1,549.8	S	262.2		245.1	244.1	2
15	1,741.9	871.4	1,724.9	1,723.9	R	175.1		158.1		1

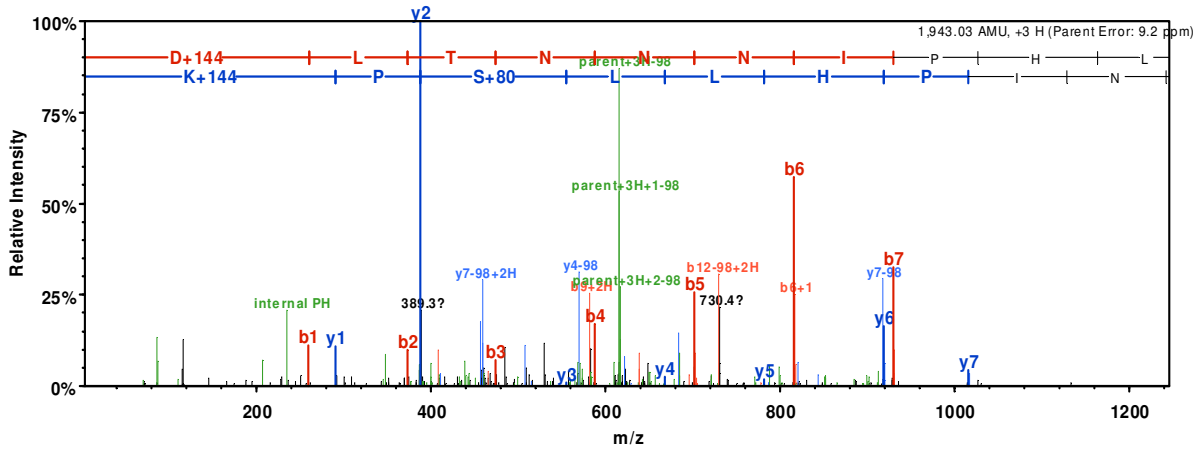
AAPK1_HUMAN: SGpSVSNYR

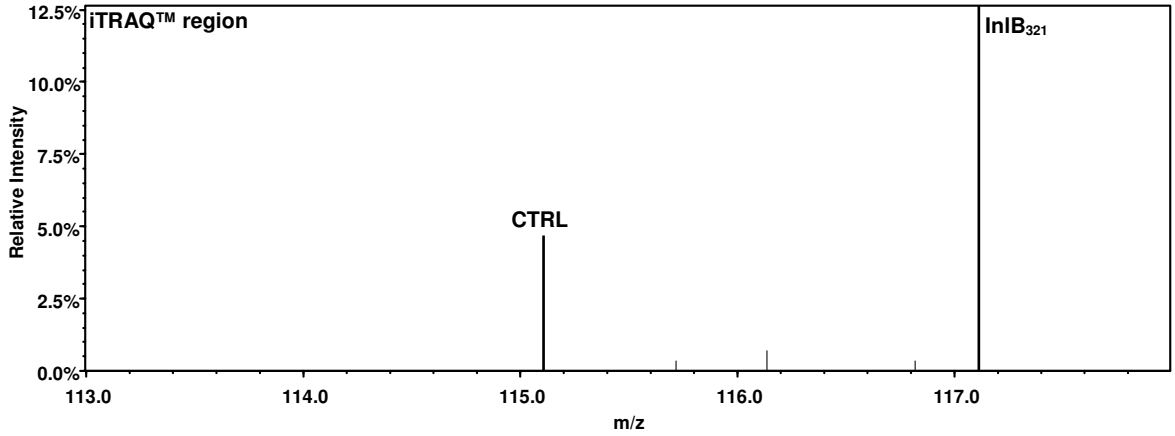




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,093.5	547.2	1,076.5	1,075.5	8
2	289.2			271.2	G	862.3	431.7	845.3	844.3	7
3	456.2			438.2	S+80	805.3	403.2	788.3	787.3	6
4	555.2			537.2	V	638.3		621.3	620.3	5
5	642.3			624.3	S	539.3		522.2	521.2	4
6	756.3	378.7	739.3	738.3	N	452.2		435.2		3
7	919.4	460.2	902.3	901.4	Y	338.2		321.2		2
8	1,093.5	547.2	1,076.5	1,075.5	R	175.1		158.1		1

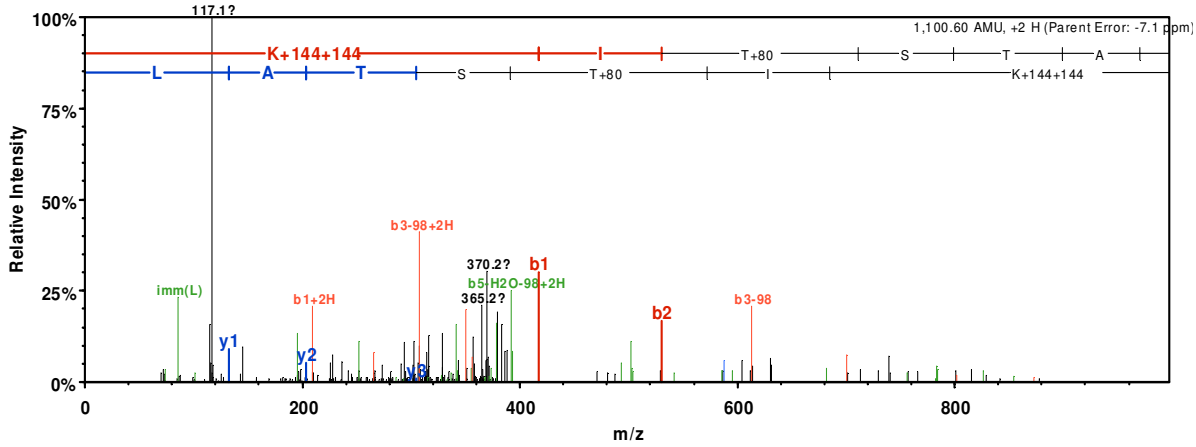
CDKL5_HUMAN: DLTNNNIPHLLpSPK

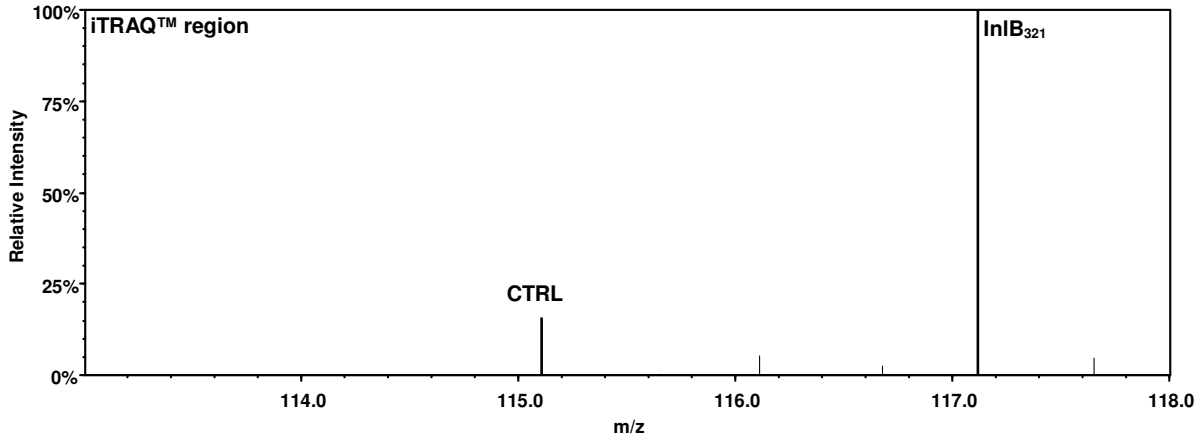




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	260.1			242.1	D+144	1,944.0	972.5	1,927.0	1,926.0	14
2	373.2			355.2	L	1,684.9	842.9	1,667.9	1,666.9	13
3	474.3			456.3	T	1,571.8	786.4	1,554.8	1,553.8	12
4	588.3		571.3	570.3	N	1,470.8	735.9	1,453.7	1,452.7	11
5	702.4		685.3	684.3	N	1,356.7	678.9	1,339.7	1,338.7	10
6	816.4	408.7	799.4	798.4	N	1,242.7	621.8	1,225.6	1,224.7	9
7	929.5	465.2	912.5	911.5	I	1,128.6	564.8	1,111.6	1,110.6	8
8	1,026.5	513.8	1,009.5	1,008.5	P	1,015.5	508.3	998.5	997.5	7
9	1,163.6	582.3	1,146.6	1,145.6	H	918.5	459.8	901.5	900.5	6
10	1,276.7	638.8	1,259.7	1,258.7	L	781.4		764.4	763.4	5
11	1,389.8	695.4	1,372.7	1,371.8	L	668.4		651.3	650.3	4
12	1,556.8	778.9	1,539.7	1,538.7	S+80	555.3		538.2	537.3	3
13	1,653.8	827.4	1,636.8	1,635.8	P	388.3		371.2		2
14	1,944.0	972.5	1,927.0	1,926.0	K+144	291.2		274.2		1

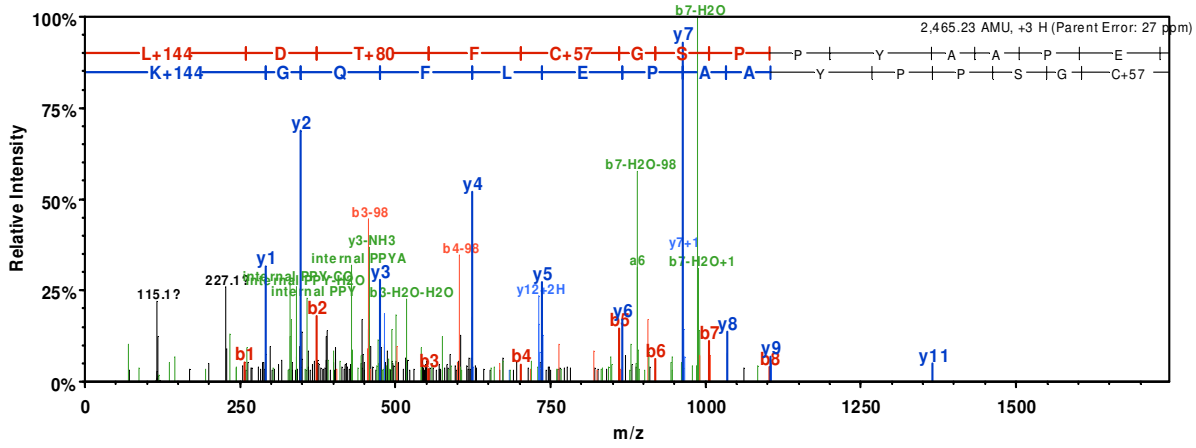
KS6A3_HUMAN: KIpTSTAL

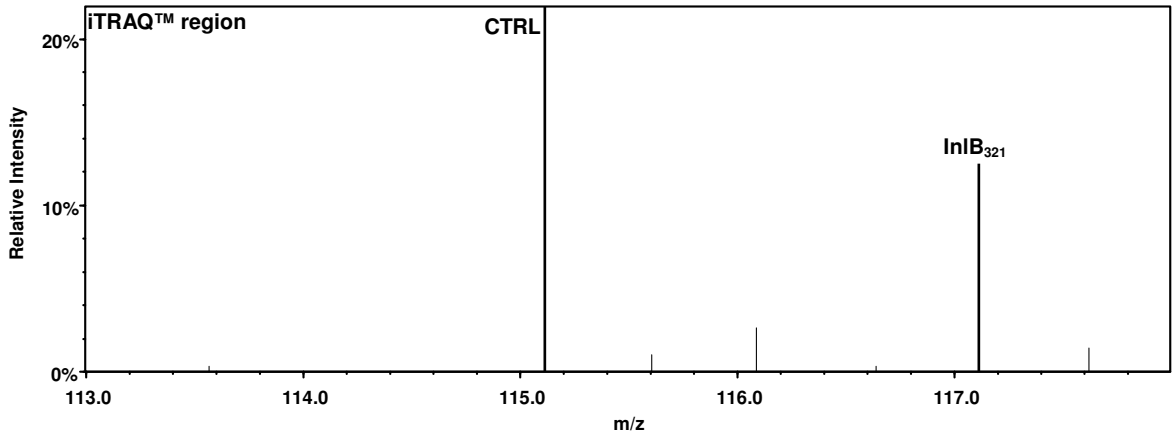




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	417.3	209.2	400.3		K+288	1,101.6	551.3	1,084.6	1,083.6	7
2	530.4	265.7	513.4		I	685.3			667.3	6
3	711.4	356.2	694.4	693.4	T+80	572.2			554.2	5
4	798.4	399.7	781.4	780.4	S	391.2			373.2	4
5	899.5	450.2	882.5	881.5	T	304.2			286.2	3
6	970.5	485.8	953.5	952.5	A	203.1				2
7	1,101.6	551.3	1,084.6	1,083.6	L	132.1				1

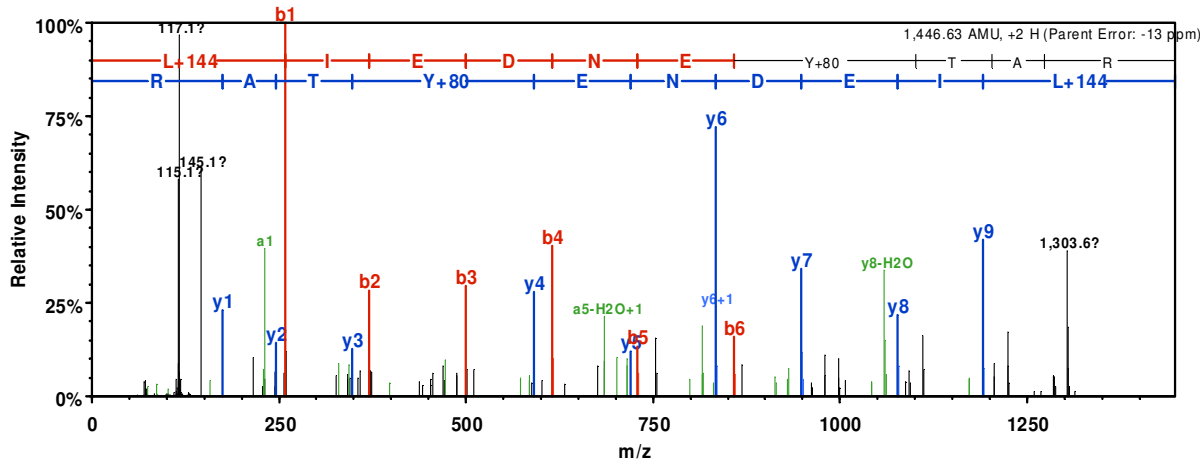
MARK2_HUMAN: LDpTFCGSPPYAAPELFQGK
(homolog in MARK1_HUMAN and MARK3_HUMAN)

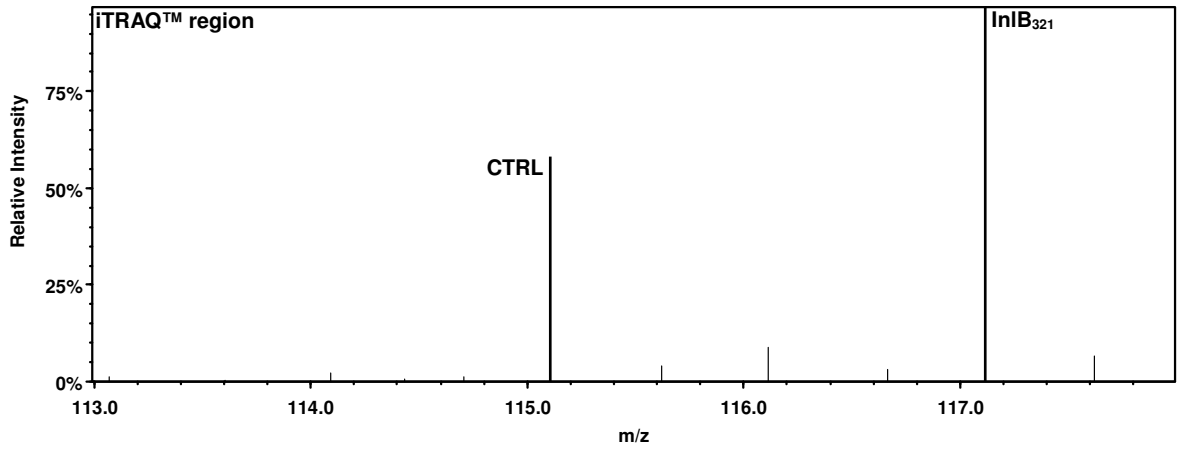




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				L+144	2,466.2	1,233.6	2,449.1	2,448.2	19
2	373.2			355.2	D	2,209.0	1,105.0	2,192.0	2,191.0	18
3	554.2			536.2	T+80	2,094.0	1,047.5	2,076.9	2,075.9	17
4	701.3			683.3	F	1,912.9	957.0	1,895.9	1,894.9	16
5	861.3			843.3	C+57	1,765.9	883.4	1,748.8	1,747.9	15
6	918.4	459.7		900.3	G	1,605.8	803.4	1,588.8	1,587.8	14
7	1,005.4	503.2		987.4	S	1,548.8	774.9	1,531.8	1,530.8	13
8	1,102.4	551.7		1,084.4	P	1,461.8	731.4	1,444.8	1,443.8	12
9	1,199.5	600.3		1,181.5	P	1,364.7	682.9	1,347.7	1,346.7	11
10	1,362.6	681.8		1,344.5	Y	1,267.7	634.3	1,250.7	1,249.7	10
11	1,433.6	717.3		1,415.6	A	1,104.6	552.8	1,087.6	1,086.6	9
12	1,504.6	752.8		1,486.6	A	1,033.6	517.3	1,016.6	1,015.6	8
13	1,601.7	801.3		1,583.7	P	962.5	481.8	945.5	944.5	7
14	1,730.7	865.9		1,712.7	E	865.5	433.2	848.5	847.5	6
15	1,843.8	922.4		1,825.8	L	736.4		719.4		5
16	1,990.9	995.9		1,972.9	F	623.4		606.3		4
17	2,118.9	1,060.0	2,101.9	2,100.9	Q	476.3		459.3		3
18	2,176.0	1,088.5	2,158.9	2,157.9	G	348.2		331.2		2
19	2,466.2	1,233.6	2,449.1	2,448.2	K+144	291.2		274.2		1

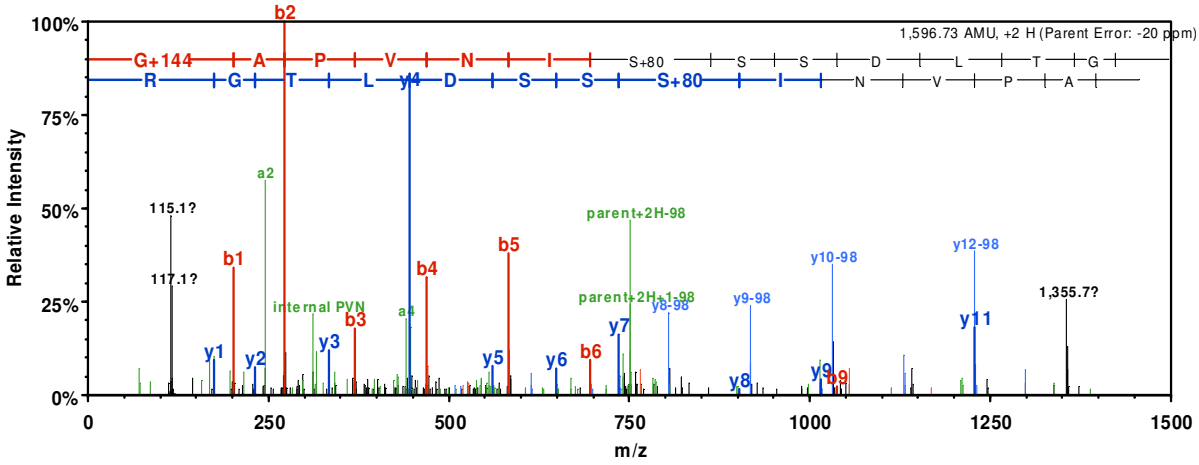
FYN_HUMAN: LIEDNEpYTAR

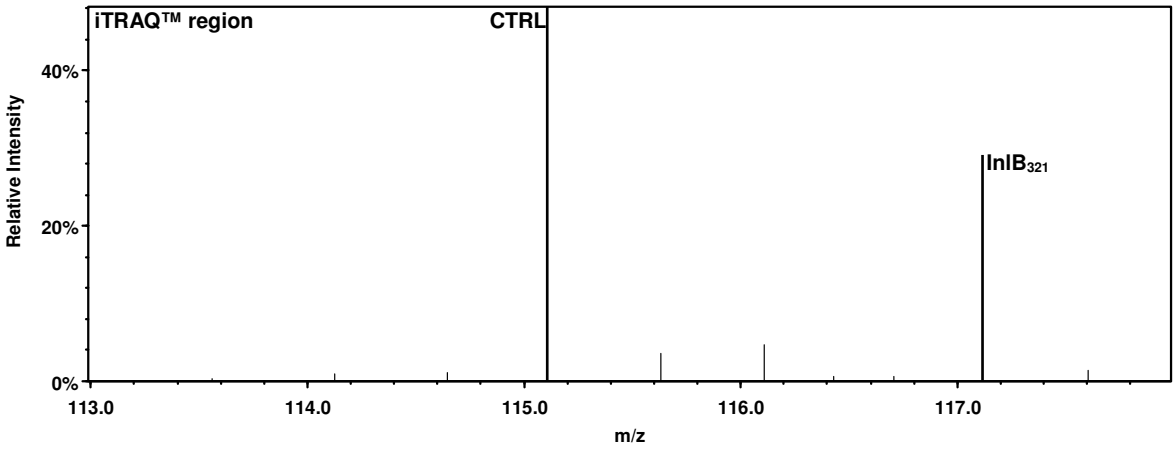




B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				L+144	1,447.7	724.3	1,430.6	1,429.6	10
2	371.3				I	1,190.5	595.7	1,173.4	1,172.5	9
3	500.3			482.3	E	1,077.4	539.2	1,060.4	1,059.4	8
4	615.3			597.3	D	948.3	474.7	931.3	930.3	7
5	729.4		712.4	711.4	N	833.3	417.2	816.3	815.3	6
6	858.4	429.7	841.4	840.4	E	719.3		702.2	701.3	5
7	1,101.5	551.2	1,084.4	1,083.5	Y+80	590.2		573.2	572.2	4
8	1,202.5	601.8	1,185.5	1,184.5	T	347.2		330.2	329.2	3
9	1,273.5	637.3	1,256.5	1,255.5	A	246.2		229.1		2
10	1,447.7	724.3	1,430.6	1,429.6	R	175.1		158.1		1

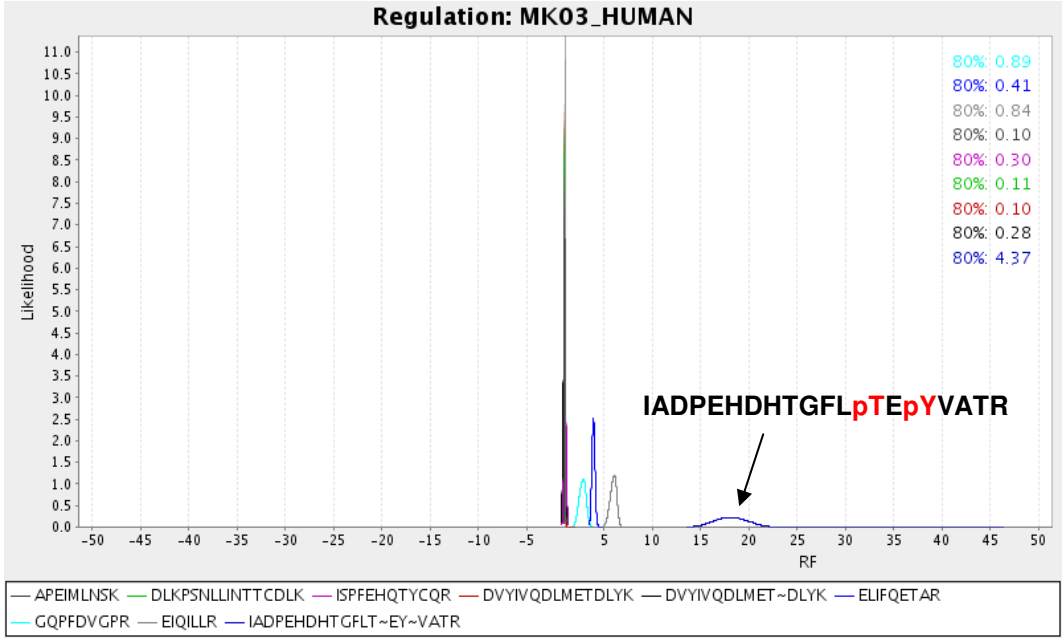
KC1D_HUMAN: GAPVNIpSSSDLTGR

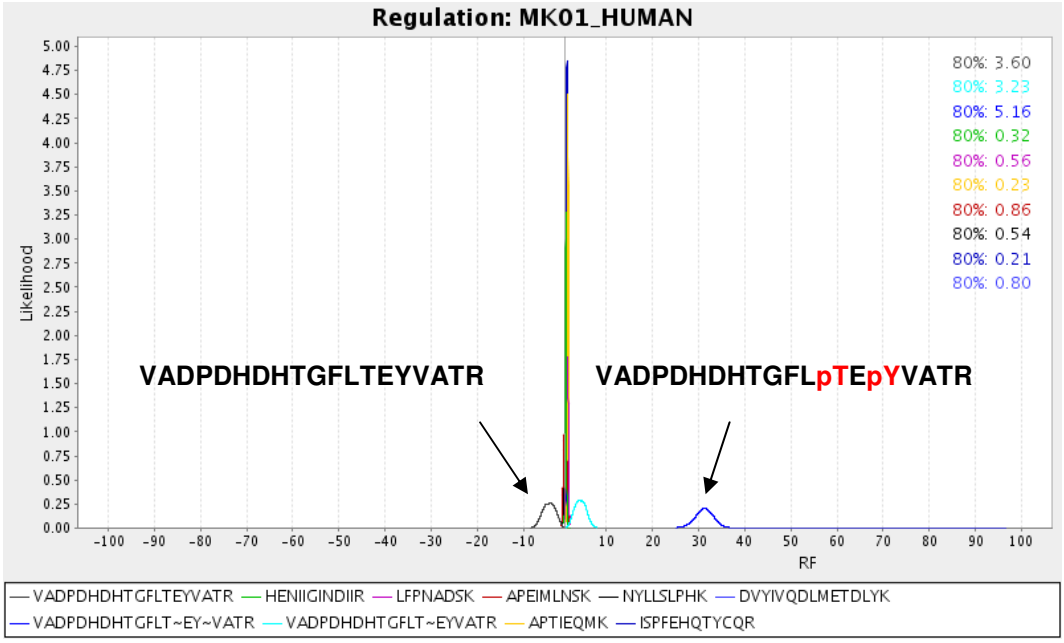


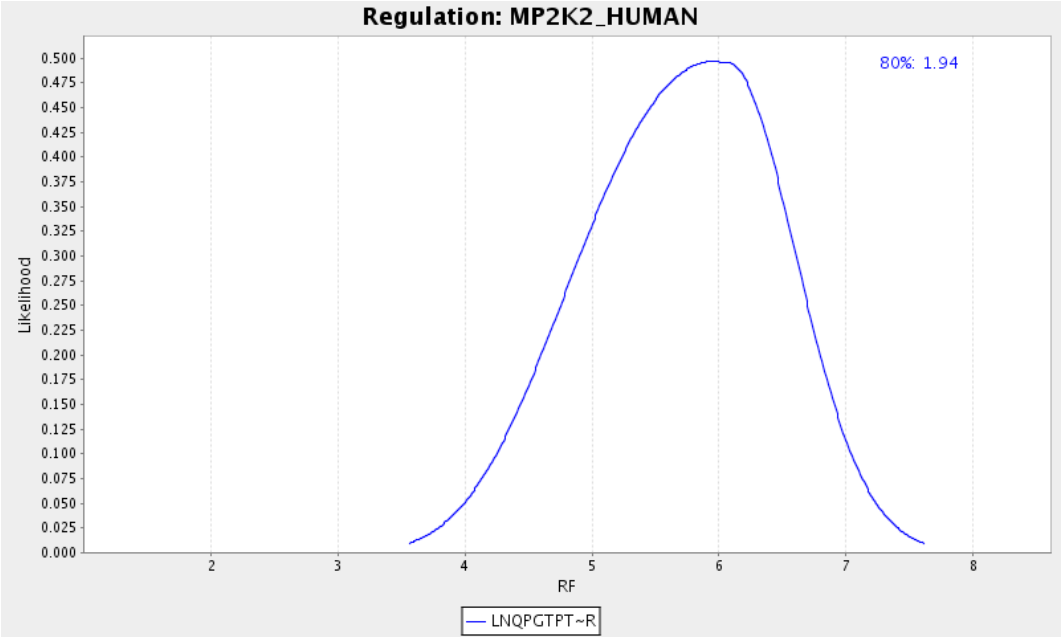


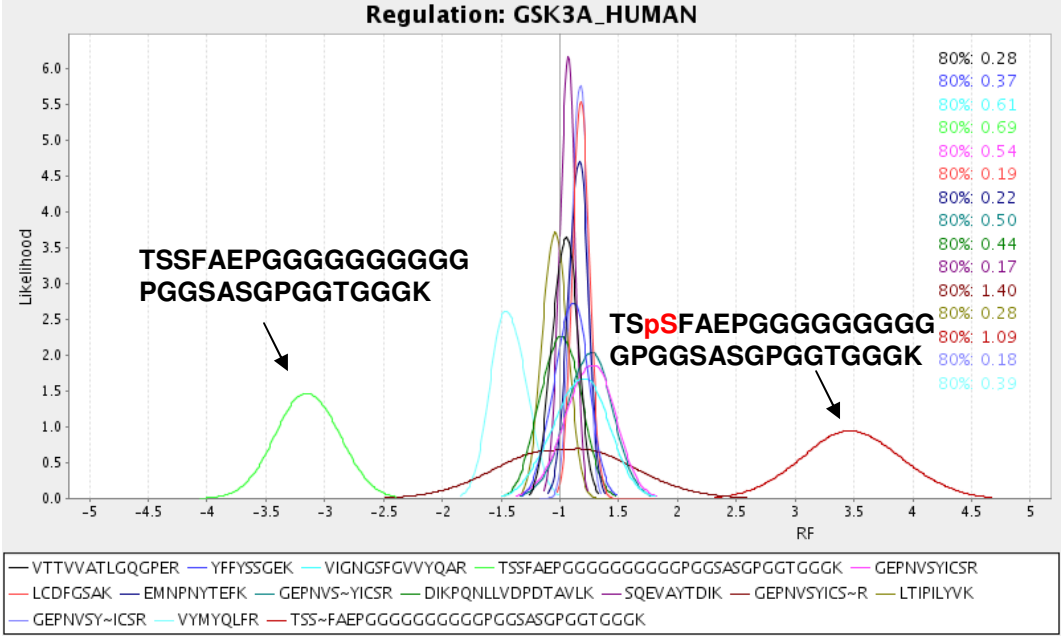
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,597.8	799.4	1,580.7	1,579.8	14
2	273.2				A	1,396.6	698.8	1,379.6	1,378.6	13
3	370.2				P	1,325.6	663.3	1,308.6	1,307.6	12
4	469.3				V	1,228.6	614.8	1,211.5	1,210.5	11
5	583.3		566.3		N	1,129.5	565.2	1,112.5	1,111.5	10
6	696.4	348.7	679.4		I	1,015.4	508.2	998.4	997.4	9
7	863.4	432.2	846.4	845.4	S+80	902.4	451.7	885.3	884.4	8
8	950.4	475.7	933.4	932.4	S	735.4	368.2	718.3	717.4	7
9	1,037.5	519.2	1,020.5	1,019.5	S	648.3	324.7	631.3	630.3	6
10	1,152.5	576.8	1,135.5	1,134.5	D	561.3		544.3	543.3	5
11	1,265.6	633.3	1,248.6	1,247.6	L	446.3		429.2	428.3	4
12	1,366.6	683.8	1,349.6	1,348.6	T	333.2		316.2	315.2	3
13	1,423.7	712.3	1,406.6	1,405.6	G	232.1		215.1		2
14	1,597.8	799.4	1,580.7	1,579.8	R	175.1		158.1		1

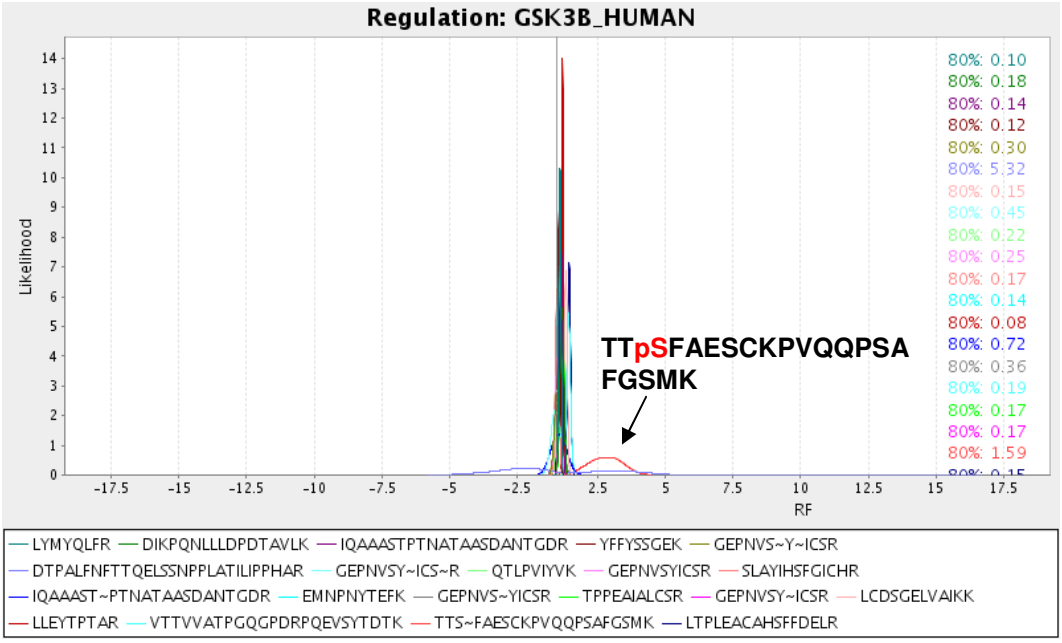
B. Likelihood curve graphics of $InlB_{321}$ regulated phosphopeptides from protein kinases according to table 1.

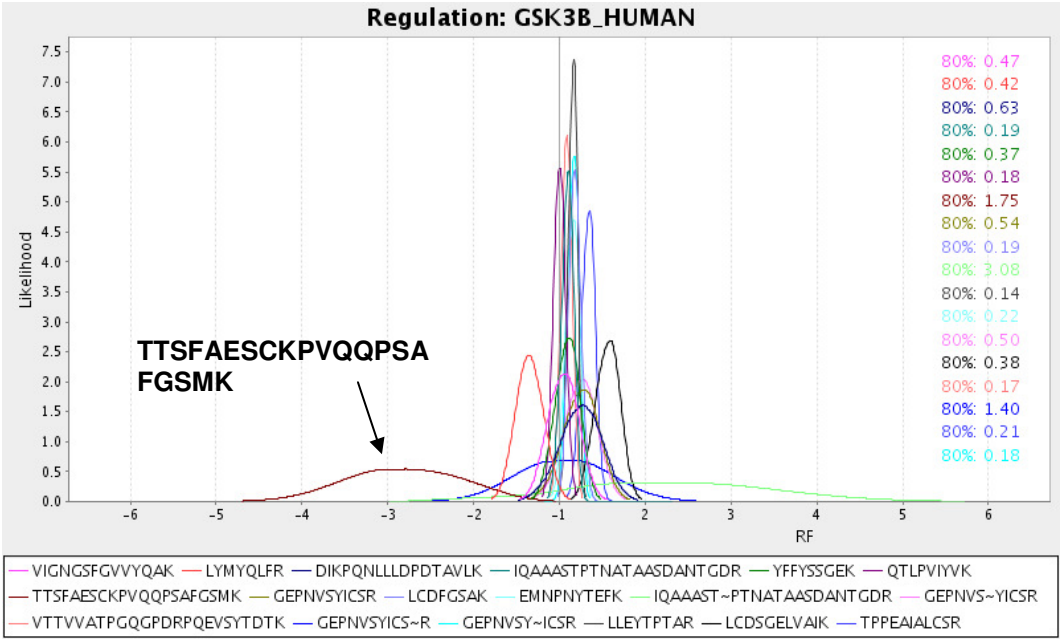


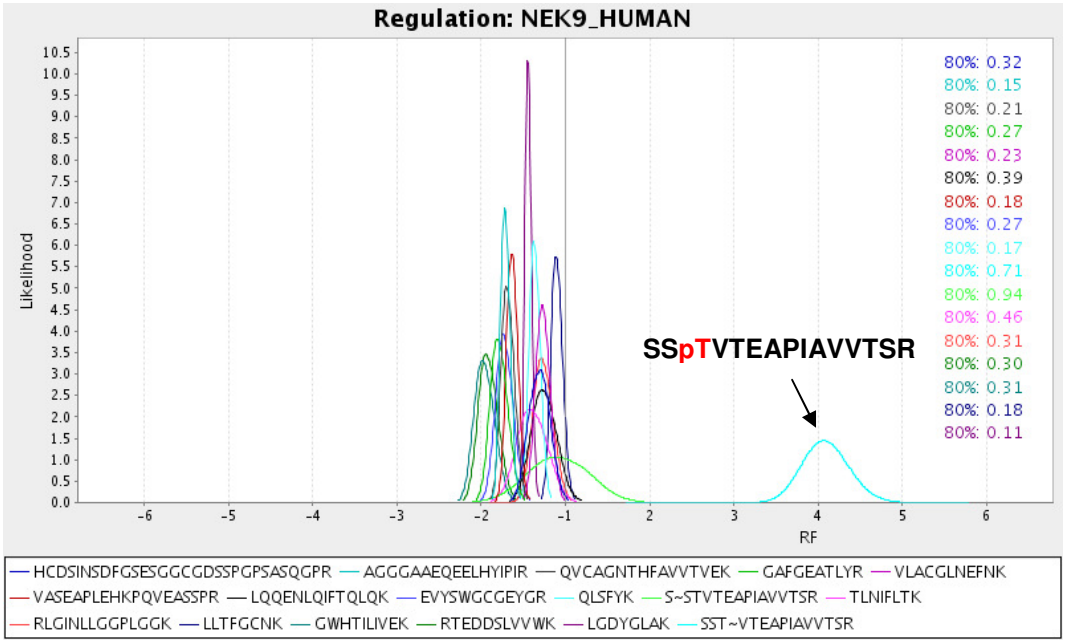


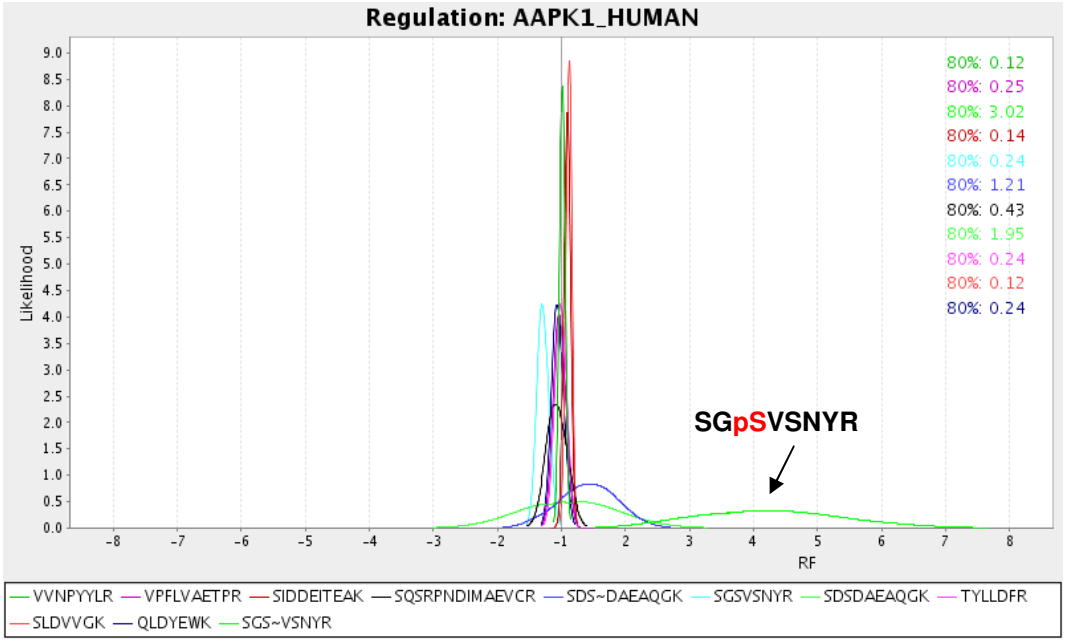

Regulation: MP2K2_HUMAN
80%: 1.94
Likelihood
RF
LNQPGTPT~R

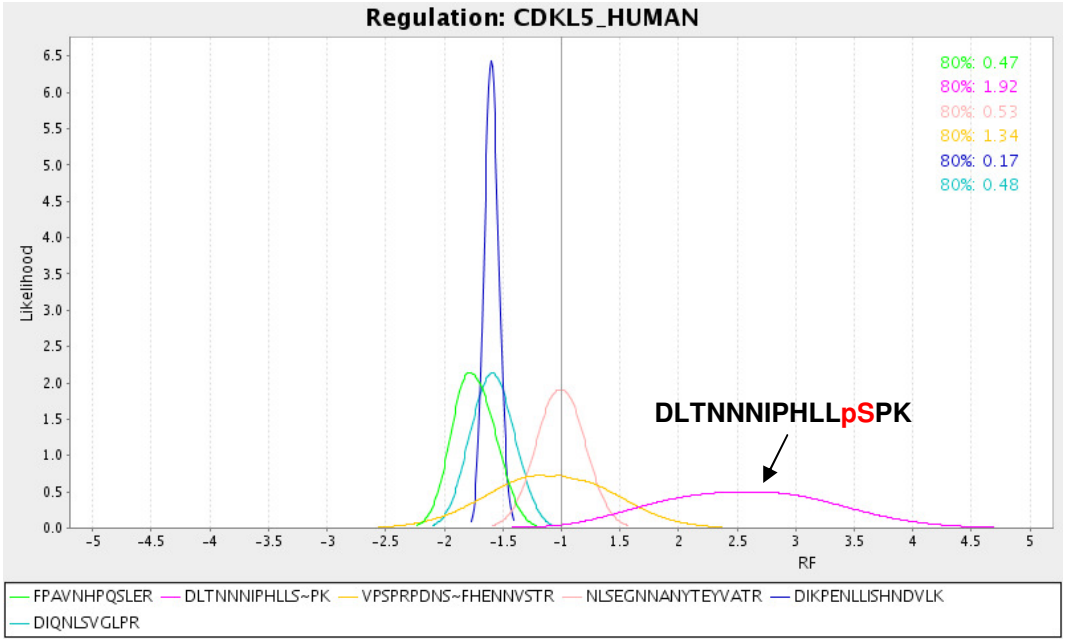

Regulation: GSK3A_HUMAN
TSSFAEPGGGGGGGGGG
PGGSASGPGGTGGGK
TSpSFAEPGGGGGGGGG
GPGGSASGPGGTGGGK
80%: 0.28
80%: 0.37
80%: 0.61
80%: 0.69
80%: 0.54
80%: 0.19
80%: 0.22
80%: 0.50
80%: 0.44
80%: 0.17
80%: 1.40
80%: 0.28
80%: 1.09
80%: 0.18
80%: 0.39
Likelihood
RF
VTTVVATLGQGPER
YFFYSSGEK
VIGNGSFGVVYQAR
TSSFAEPGGGGGGGGGPGGSASGPGGTGGGK
GEPNVSYICSR
LCDFGSAK
EMNPNYTEFK
GEPNVS~YICSR
DIKPQNLLVDPDTAVLK
SQEVAYTDIK
GEPNVSYICS~R
LTIPILYVK
GEPNVSY~ICSR
VYMYQLFR
TSS~FAEPGGGGGGGGGPGGSASGPGGTGGGK

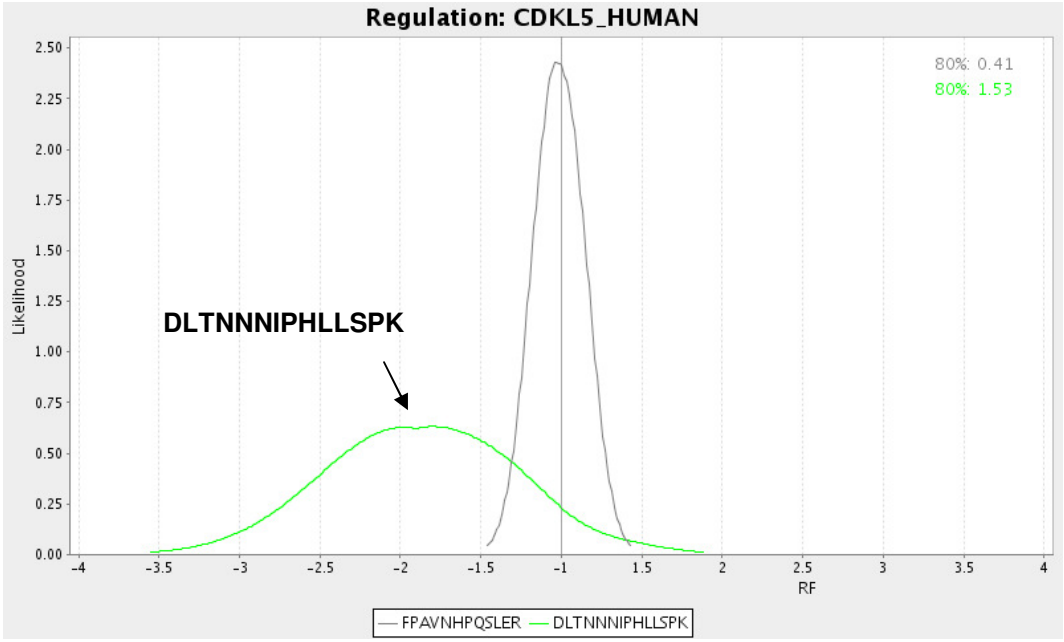

Regulation: GSK3B_HUMAN
Likelihood
RF
TTpSFAESCKPVQQPSA
FGSMK
80%: 0.10
80%: 0.18
80%: 0.14
80%: 0.12
80%: 0.30
80%: 5.32
80%: 0.15
80%: 0.45
80%: 0.22
80%: 0.25
80%: 0.17
80%: 0.14
80%: 0.08
80%: 0.72
80%: 0.36
80%: 0.19
80%: 0.17
80%: 0.17
80%: 1.59
LYMYQLFR DIKPQNLLLDPDTAVLK IQAAASTPTNATAASDANTGDR YFFYSSGEK GEPNVS~Y~ICSR
DTPALFNFTTQELSSNPPLATILIPPHAR GEPNVSY~ICS~R QTLPVIYVK GEPNVSYICSR SLAYIHSFGICHR
IQAAAST~PTNATAASDANTGDR EMNPNYTEFK GEPNVS~YICSR TPPEAIALCSR GEPNVSY~ICSR LCDSGELVAIKK
LLEYTPTAR VTTVVATPGQGPDRPQEVSYTDTK TTS~FAESCKPVQQPSAFGSMK LTPLEACAHSFFDELR

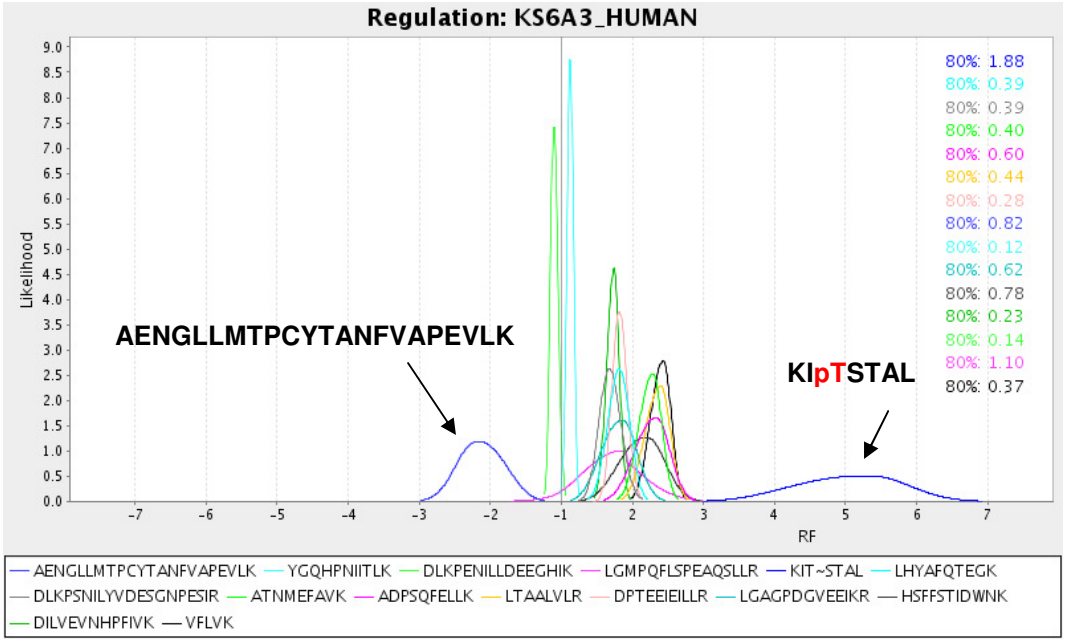

Regulation: GSK3B_HUMAN
Likelihood
RF
TTSFAESCKPVQQPSA
FGSMK
80%: 0.47
80%: 0.42
80%: 0.63
80%: 0.19
80%: 0.37
80%: 0.18
80%: 1.75
80%: 0.54
80%: 0.19
80%: 3.08
80%: 0.14
80%: 0.22
80%: 0.50
80%: 0.38
80%: 0.17
80%: 1.40
80%: 0.21
80%: 0.18
VIGNGSFGVVYQAK LYMYQLFR DIKPQNLLLDPDTAVLK IQAAASTPTNATAASDANTGDR YFFYSSGEK QTLPVIYVK
TTSFAESCKPVQQPSAFGSMK GEPNVSYICSR LCDFGSAK EMNPNYTEFK IQAAAST~PTNATAASDANTGDR GEPNVS~YICSR
VTTVVATPGQGPDRPQEVSYTDTK GEPNVSYICS~R GEPNVSY~ICSR LLEYTPTAR LCDSGELVAIK TPPEAIALCSR

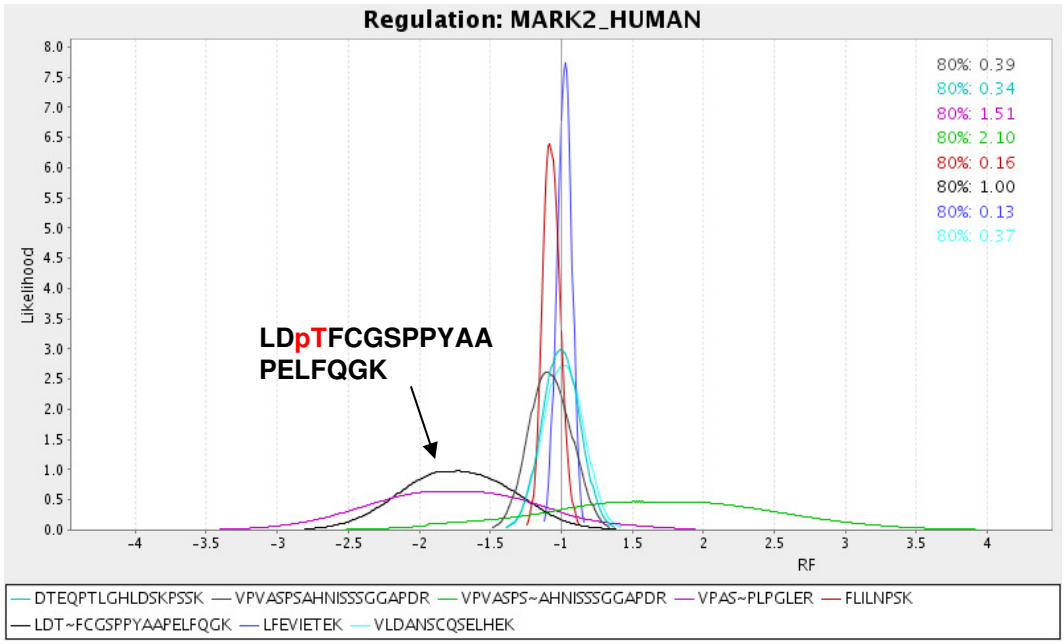

Regulation: NEK9_HUMAN
Likelihood
RF
SSpTVTEAPIAVVTSR
80%: 0.32
80%: 0.15
80%: 0.21
80%: 0.27
80%: 0.23
80%: 0.39
80%: 0.18
80%: 0.27
80%: 0.17
80%: 0.71
80%: 0.94
80%: 0.46
80%: 0.31
80%: 0.30
80%: 0.31
80%: 0.18
80%: 0.11
HCDSINSDFGSESGGCGDSSPGPSASQGPR
AGGGAAEQEELHYIPIR
QVCAGNTHFAVVTVEK
GAFGEATLYR
VLACGLNEFNK
VASEAPLEHKPQVEASSPR
LQQENLQIFTQLQK
EVYSWGCGEYGR
QLSFYK
S~STVTEAPIAVVTSR
TLNIFLTK
RLGINLLGGPLGGK
LLTFGCNK
GWHTILIVEK
RTEDDSLVVWK
LGDYGLAK
SST~VTEAPIAVVTSR

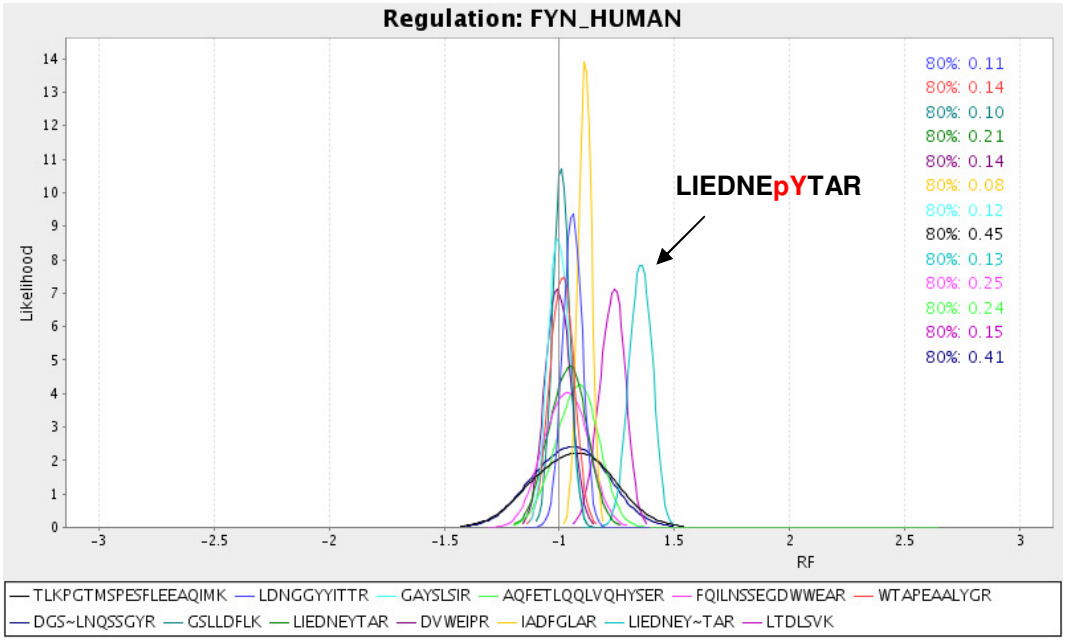

Regulation: AAPK1_HUMAN
Likelihood
RF
SGpSVSNYR
80%: 0.12
80%: 0.25
80%: 3.02
80%: 0.14
80%: 0.24
80%: 1.21
80%: 0.43
80%: 1.95
80%: 0.24
80%: 0.12
80%: 0.24
VVNPYYLR
VPFLVAETPR
SIDDEITEAK
SQSRPNDIMAEVCR
SDS~DAEAQGK
SGSVSNYR
SDSDAEAQGK
TYLLDFR
SLDVVGK
QLDYEWK
SGS~VSNYR

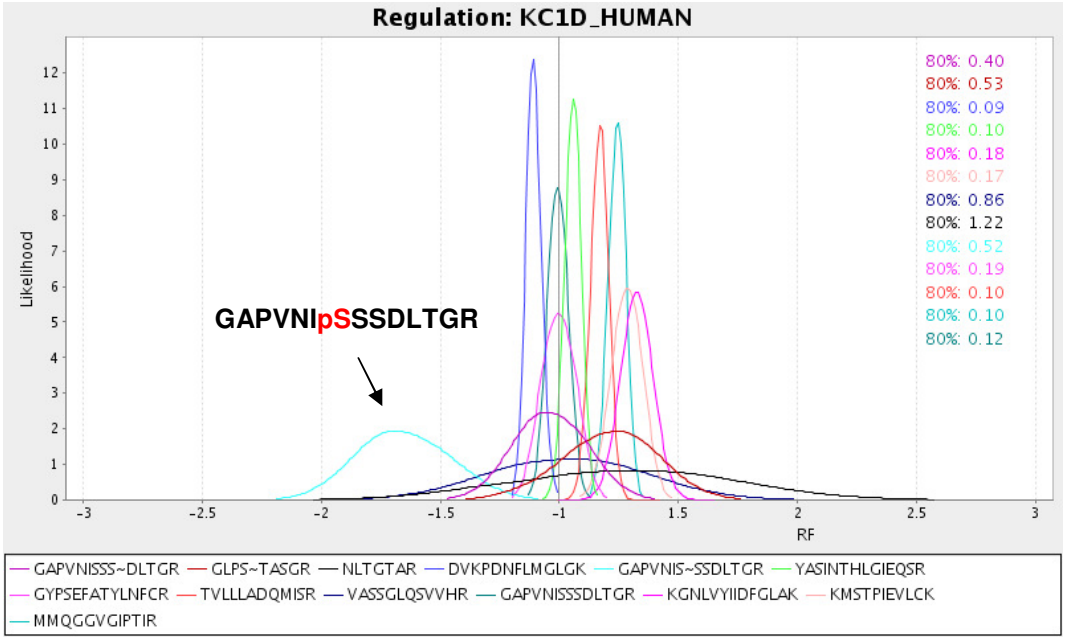

Regulation: CDKL5_HUMAN
80%: 0.47
80%: 1.92
80%: 0.53
80%: 1.34
80%: 0.17
80%: 0.48
Likelihood
RF
DLTNNNIPHLLpSPK
FPAVNHPQSLER
DLTNNNIPHLLS~PK
VPSPRPDNS~FHENNVSTR
NLSEGNNANYTEYVATR
DIKPENLLISHNDVLK
DIQNLSVGLPR


Regulation: CDKL5_HUMAN
80%: 0.41
80%: 1.53
Likelihood
RF
DLTNNNIPHLLSPK
FPAVNHPQSLER
DLTNNNIPHLLSPK


Regulation: KS6A3_HUMAN
Likelihood
RF
AENGLLMTPCYTANFVAPEVLK
KIpTSTAL
80%: 1.88
80%: 0.39
80%: 0.39
80%: 0.40
80%: 0.60
80%: 0.44
80%: 0.28
80%: 0.82
80%: 0.12
80%: 0.62
80%: 0.78
80%: 0.23
80%: 0.14
80%: 1.10
80%: 0.37
AENGLLMTPCYTANFVAPEVLK
YGQHPNIITLK
DLKPENILLDEEGHIK
LGMPQFLSPEAQSLLR
KIT~STAL
LHYAFQTEGK
DLKPSNILYVDESGNPESIR
ATNMEFAVK
ADPSQFELLK
LTAALVLR
DPTEEIEILLR
LGAGPDGVEEIKR
HSFFSTIDWNK
DILVEVNHPFIVK
VFLVK

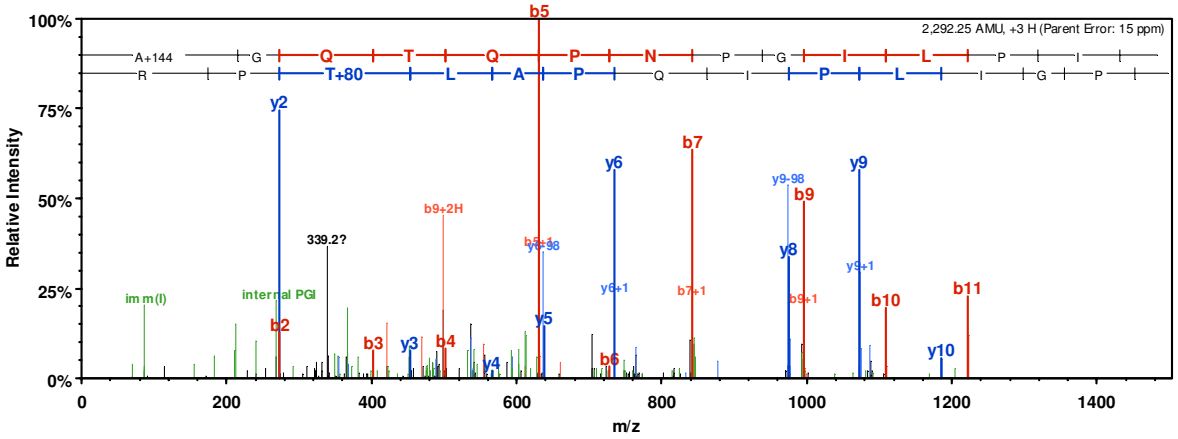

Regulation: MARK2_HUMAN
Likelihood
RF
LDpTFCGSPPYAA
PELFQGK
80%: 0.39
80%: 0.34
80%: 1.51
80%: 2.10
80%: 0.16
80%: 1.00
80%: 0.13
80%: 0.37
DTEQPTLGHLDSKPSSK
VPVASPSAHNISSSGGAPDR
VPVASPS~AHNISSSGGAPDR
VPAS~PLPGLER
FLILNPSK
LDT~FCGSPPYAAPELFQGK
LFEVIETEK
VLDANSCQSELHEK


Regulation: FYN_HUMAN
Likelihood
RF
LIEDNEpYTAR
80%: 0.11
80%: 0.14
80%: 0.10
80%: 0.21
80%: 0.14
80%: 0.08
80%: 0.12
80%: 0.45
80%: 0.13
80%: 0.25
80%: 0.24
80%: 0.15
80%: 0.41
TLKPGTMSPESFLEEAQIMK
LDNGGYYITTR
GAYSLSIR
AQFETLQQLVQHYSER
FQILNSSEGDWWEAR
WTAPEAALYGR
DGS~LNQSSGYR
GSLLDFLK
LIEDNEYTAR
DVWEIPR
IADFGLAR
LIEDNEY~TAR
LTDLSVK


Regulation: KC1D_HUMAN
Likelihood
RF
GAPVNIpSSSDLTGR
80%: 0.40
80%: 0.53
80%: 0.09
80%: 0.10
80%: 0.18
80%: 0.17
80%: 0.86
80%: 1.22
80%: 0.52
80%: 0.19
80%: 0.10
80%: 0.10
80%: 0.12
GAPVNISSS~DLTGR
GLPS~TASGR
NLTGTAR
DVKPDNFLMGLGK
GAPVNIS~SSDLTGR
YASINTHLGIEQSR
GYPSEFATYLNFCR
TVLLLADQMISR
VASSGLQSVVHR
GAPVNISSSDLTGR
KGNLVYIIDFGLAK
KMSTPIEVLCK
MMQGGVGIPTIR

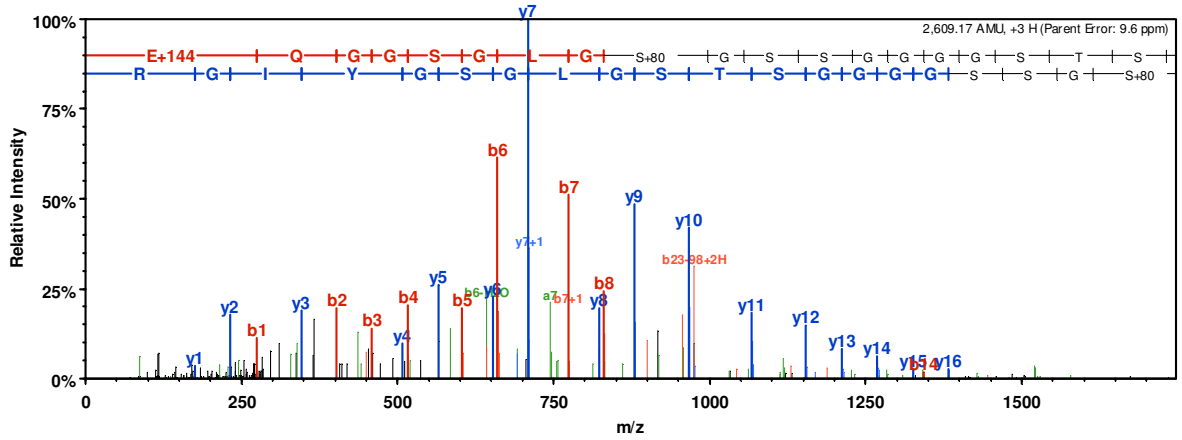
C. Fragmentation spectra and mass tables of phosphopeptides from protein kinases according to supplementary data S1/S2.

AAK1_HUMAN: AGQTQPNPGILPIQPALpTPR



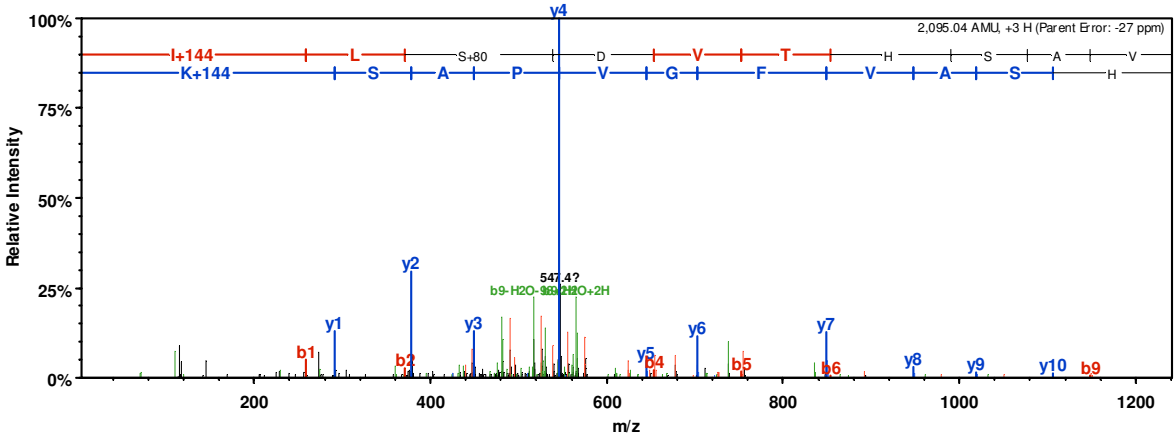
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	216.1				A+144	2,293.2	1,147.1	2,276.2	2,275.2	20
2	273.2				G	2,078.1	1,039.5	2,061.1	2,060.1	19
3	401.2		384.2		Q	2,021.1	1,011.0	2,004.0	2,003.0	18
4	502.3		485.2	484.3	T	1,893.0	947.0	1,876.0	1,875.0	17
5	630.3		613.3	612.3	Q	1,792.0	896.5	1,774.9	1,773.9	16
6	727.4	364.2	710.4	709.4	P	1,663.9	832.5	1,646.9	1,645.9	15
7	841.4	421.2	824.4	823.4	N	1,566.8	783.9	1,549.8	1,548.8	14
8	938.5	469.7	921.5	920.5	P	1,452.8	726.9	1,435.8	1,434.8	13
9	995.5	498.3	978.5	977.5	G	1,355.7	678.4	1,338.7	1,337.7	12
10	1,108.6	554.8	1,091.6	1,090.6	I	1,298.7	649.9	1,281.7	1,280.7	11
11	1,221.7	611.3	1,204.6	1,203.7	L	1,185.6	593.3	1,168.6	1,167.6	10
12	1,318.7	659.9	1,301.7	1,300.7	P	1,072.6	536.8	1,055.5	1,054.5	9
13	1,431.8	716.4	1,414.8	1,413.8	I	975.5	488.3	958.5	957.5	8
14	1,559.9	780.4	1,542.8	1,541.9	Q	862.4	431.7	845.4	844.4	7
15	1,656.9	829.0	1,639.9	1,638.9	P	734.4	367.7	717.3	716.3	6
16	1,728.0	864.5	1,710.9	1,709.9	A	637.3		620.3	619.3	5
17	1,841.0	921.0	1,824.0	1,823.0	L	566.3		549.2	548.3	4
18	2,022.1	1,011.5	2,005.0	2,004.0	T+80	453.2		436.2	435.2	3
19	2,119.1	1,060.1	2,102.1	2,101.1	P	272.2		255.1		2
20	2,293.2	1,147.1	2,276.2	2,275.2	R	175.1		158.1		1

AAK1_HUMAN: EQGGSGLGpSGSSGGGGSTSGLGSGYIGR



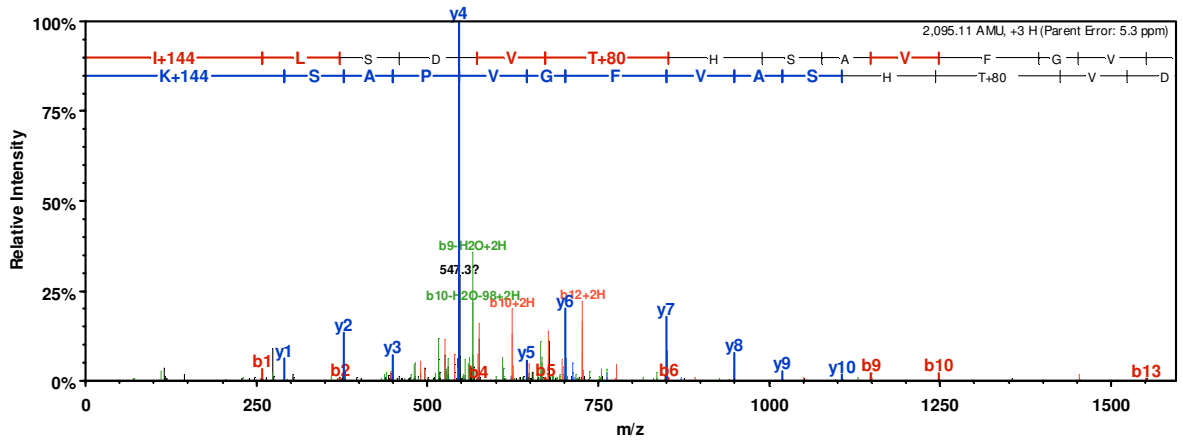
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	274.2			256.1	E+144	2,610.2	1,305.6	2,593.1	2,592.1	28
2	402.2		385.2	384.2	Q	2,337.0	1,169.0	2,320.0	2,319.0	27
3	459.2		442.2	441.2	G	2,209.0	1,105.0	2,191.9	2,190.9	26
4	516.3		499.2	498.2	G	2,151.9	1,076.5	2,134.9	2,133.9	25
5	603.3		586.3	585.3	S	2,094.9	1,048.0	2,077.9	2,076.9	24
6	660.3	330.7	643.3	642.3	G	2,007.9	1,004.4	1,990.9	1,989.9	23
7	773.4	387.2	756.4	755.4	L	1,950.9	975.9	1,933.8	1,932.8	22
8	830.4	415.7	813.4	812.4	G	1,837.8	919.4	1,820.7	1,819.8	21
9	997.4	499.2	980.4	979.4	S+80	1,780.8	890.9	1,763.7	1,762.7	20
10	1,054.4	527.7	1,037.4	1,036.4	G	1,613.8	807.4	1,596.7	1,595.7	19
11	1,141.5	571.2	1,124.4	1,123.5	S	1,556.7	778.9	1,539.7	1,538.7	18
12	1,228.5	614.8	1,211.5	1,210.5	S	1,469.7	735.4	1,452.7	1,451.7	17
13	1,285.5	643.3	1,268.5	1,267.5	G	1,382.7	691.8	1,365.6	1,364.7	16
14	1,342.5	671.8	1,325.5	1,324.5	G	1,325.6	663.3	1,308.6	1,307.6	15
15	1,399.6	700.3	1,382.5	1,381.6	G	1,268.6	634.8	1,251.6	1,250.6	14
16	1,456.6	728.8	1,439.6	1,438.6	G	1,211.6	606.3	1,194.6	1,193.6	13
17	1,543.6	772.3	1,526.6	1,525.6	S	1,154.6	577.8	1,137.6	1,136.6	12
18	1,644.7	822.8	1,627.6	1,626.7	T	1,067.5	534.3	1,050.5	1,049.5	11
19	1,731.7	866.4	1,714.7	1,713.7	S	966.5	483.8	949.5	948.5	10
20	1,788.7	894.9	1,771.7	1,770.7	G	879.5	440.2	862.4	861.5	9
21	1,901.8	951.4	1,884.8	1,883.8	L	822.4	411.7	805.4	804.4	8
22	1,958.8	979.9	1,941.8	1,940.8	G	709.4	355.2	692.3	691.4	7
23	2,045.9	1,023.4	2,028.8	2,027.8	S	652.3	326.7	635.3	634.3	6
24	2,102.9	1,051.9	2,085.8	2,084.9	G	565.3		548.3		5
25	2,265.9	1,133.5	2,248.9	2,247.9	Y	508.3		491.3		4
26	2,379.0	1,190.0	2,362.0	2,361.0	I	345.2		328.2		3
27	2,436.0	1,218.5	2,419.0	2,418.0	G	232.1		215.1		2
28	2,610.2	1,305.6	2,593.1	2,592.1	R	175.1		158.1		1

AAK1_HUMAN: ILpSDVTHSAVFGVPASK



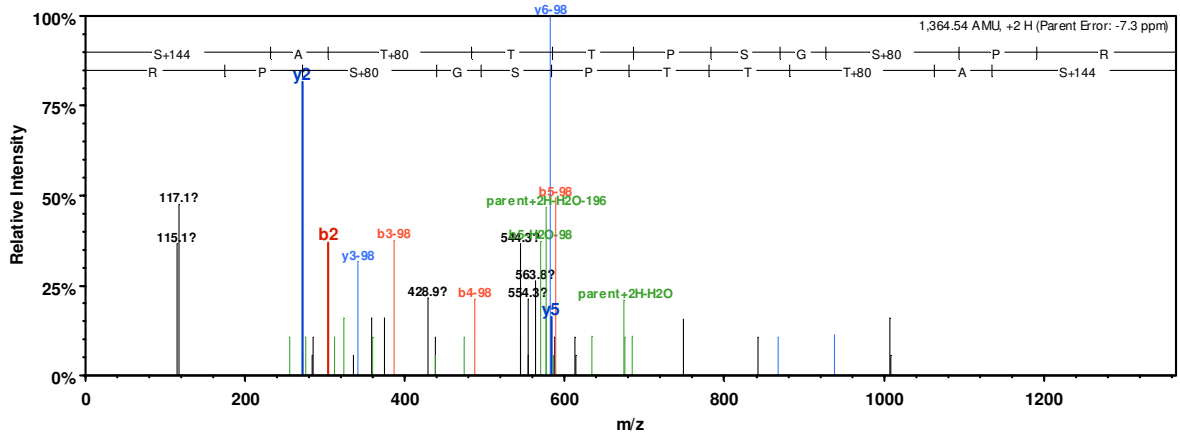
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				I+144	2,096.1	1,048.6	2,079.1	2,078.1	17
2	371.3				L	1,838.9	920.0	1,821.9	1,820.9	16
3	538.3			520.3	S+80	1,725.8	863.4	1,708.8	1,707.8	15
4	653.3			635.3	D	1,558.8	779.9	1,541.8	1,540.8	14
5	752.4			734.4	V	1,443.8	722.4	1,426.8	1,425.8	13
6	853.4	427.2		835.4	T	1,344.7	672.9	1,327.7	1,326.7	12
7	990.5	495.7		972.5	H	1,243.7	622.3	1,226.7	1,225.7	11
8	1,077.5	539.3		1,059.5	S	1,106.6	553.8	1,089.6	1,088.6	10
9	1,148.5	574.8		1,130.5	A	1,019.6	510.3	1,002.6	1,001.6	9
10	1,247.6	624.3		1,229.6	V	948.6	474.8	931.5	930.6	8
11	1,394.7	697.8		1,376.7	F	849.5	425.3	832.5	831.5	7
12	1,451.7	726.4		1,433.7	G	702.4	351.7	685.4	684.4	6
13	1,550.8	775.9		1,532.8	V	645.4		628.4	627.4	5
14	1,647.8	824.4		1,629.8	P	546.3		529.3	528.3	4
15	1,718.9	859.9		1,700.9	A	449.3		432.3	431.3	3
16	1,805.9	903.5		1,787.9	S	378.2		361.2	360.2	2
17	2,096.1	1,048.6	2,079.1	2,078.1	K+144	291.2		274.2		1

AAK1_HUMAN: ILpSDVpTHSAVFGVPASK



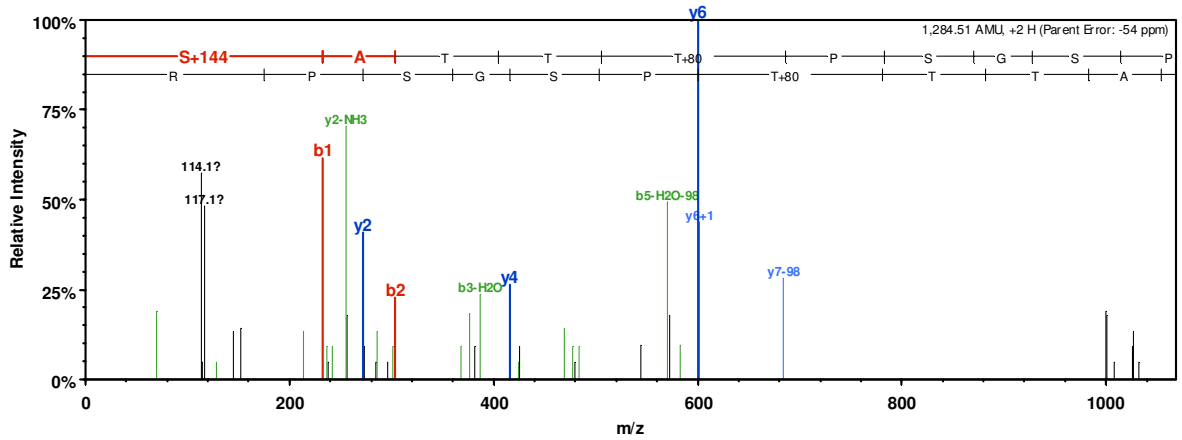
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				I+144	2,096.1	1,048.6	2,079.1	2,078.1	17
2	371.3				L	1,838.9	920.0	1,821.9	1,820.9	16
3	458.3			440.3	S	1,725.8	863.4	1,708.8	1,707.8	15
4	573.3			555.3	D	1,638.8	819.9	1,621.8	1,620.8	14
5	672.4			654.4	V	1,523.8	762.4	1,506.7	1,505.8	13
6	853.4	427.2		835.4	T+80	1,424.7	712.9	1,407.7	1,406.7	12
7	990.5	495.7		972.5	H	1,243.7	622.3	1,226.7	1,225.7	11
8	1,077.5	539.3		1,059.5	S	1,106.6	553.8	1,089.6	1,088.6	10
9	1,148.5	574.8		1,130.5	A	1,019.6	510.3	1,002.6	1,001.6	9
10	1,247.6	624.3		1,229.6	V	948.6	474.8	931.5	930.6	8
11	1,394.7	697.8		1,376.7	F	849.5	425.3	832.5	831.5	7
12	1,451.7	726.4		1,433.7	G	702.4	351.7	685.4	684.4	6
13	1,550.8	775.9		1,532.8	V	645.4		628.4	627.4	5
14	1,647.8	824.4		1,629.8	P	546.3		529.3	528.3	4
15	1,718.9	859.9		1,700.9	A	449.3		432.3	431.3	3
16	1,805.9	903.5		1,787.9	S	378.2		361.2	360.2	2
17	2,096.1	1,048.6	2,079.1	2,078.1	K+144	291.2		274.2		1

AAK1_HUMAN: SApTTTPSGpSPR



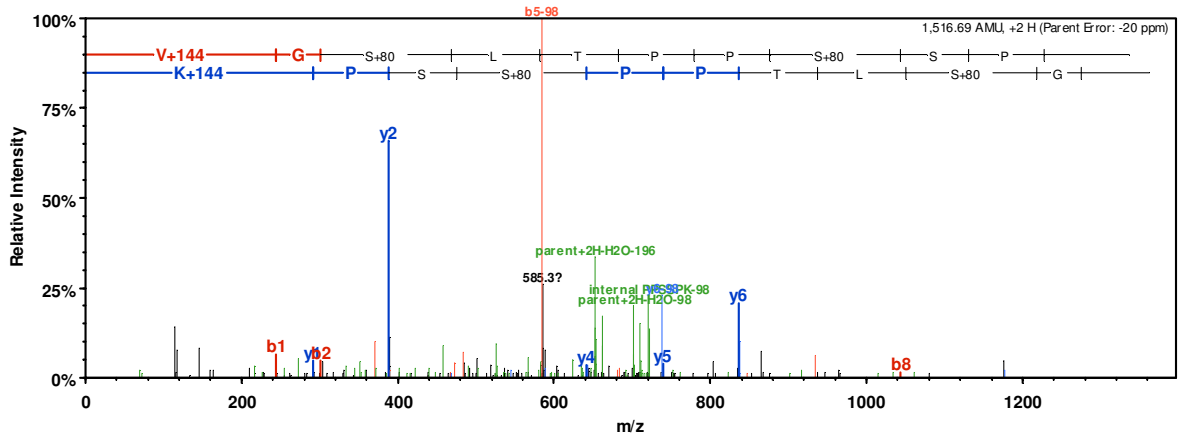
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,365.6	683.3	1,348.5	1,347.5	11
2	303.2			285.2	A	1,134.4	567.7	1,117.4	1,116.4	10
3	484.2			466.2	T+80	1,063.4	532.2	1,046.4	1,045.4	9
4	585.2			567.2	T	882.4	441.7	865.3	864.4	8
5	686.3			668.3	T	781.3	391.2	764.3	763.3	7
6	783.3	392.2		765.3	P	680.3	340.6	663.3	662.3	6
7	870.4	435.7		852.4	S	583.2		566.2	565.2	5
8	927.4	464.2		909.4	G	496.2		479.2	478.2	4
9	1,094.4	547.7		1,076.4	S+80	439.2		422.1	421.2	3
10	1,191.4	596.2		1,173.4	P	272.2		255.1		2
11	1,365.6	683.3	1,348.5	1,347.5	R	175.1		158.1		1

AAK1_HUMAN: SATTpTPSGSPR



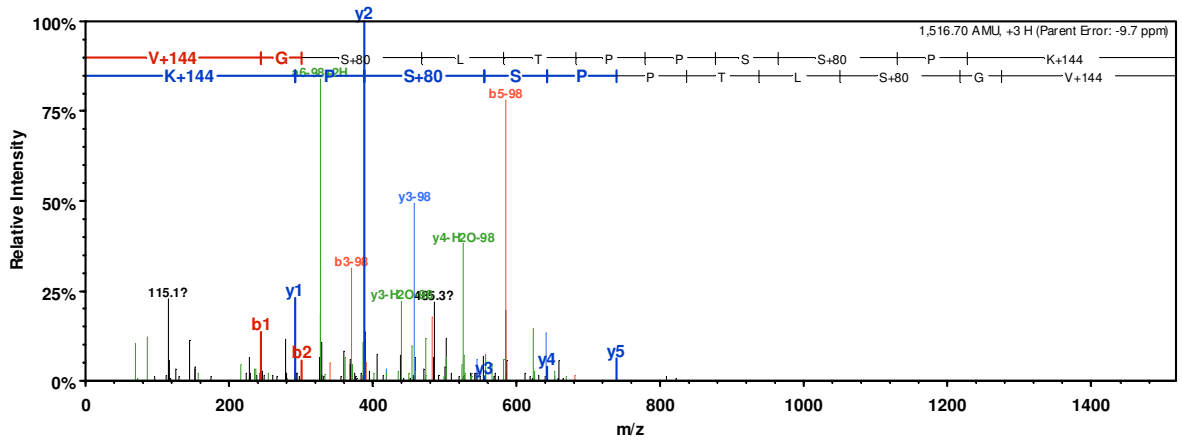
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,285.6	643.3	1,268.6	1,267.6	11
2	303.2			285.2	A	1,054.5	527.7	1,037.4	1,036.4	10
3	404.2			386.2	T	983.4	492.2	966.4	965.4	9
4	505.3			487.3	T	882.4	441.7	865.3	864.4	8
5	686.3			668.3	T+80	781.3	391.2	764.3	763.3	7
6	783.3	392.2		765.3	P	600.3	300.7	583.3	582.3	6
7	870.4	435.7		852.4	S	503.3		486.2	485.2	5
8	927.4	464.2		909.4	G	416.2		399.2	398.2	4
9	1,014.4	507.7		996.4	S	359.2		342.2	341.2	3
10	1,111.5	556.2		1,093.5	P	272.2		255.1		2
11	1,285.6	643.3	1,268.6	1,267.6	R	175.1		158.1		1

AAK1_HUMAN: VGpSLTPPpSSPK



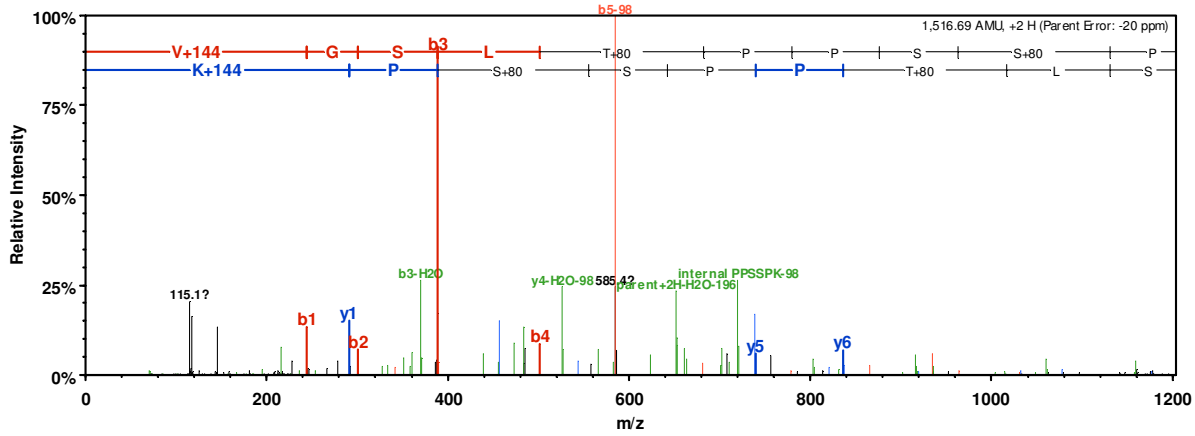
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,517.7	759.4	1,500.7	1,499.7	11
2	301.2				G	1,274.6	637.8	1,257.5	1,256.5	10
3	468.2			450.2	S+80	1,217.5	609.3	1,200.5	1,199.5	9
4	581.3			563.3	L	1,050.5	525.8	1,033.5	1,032.5	8
5	682.3			664.3	T	937.5	469.2	920.4	919.4	7
6	779.4	390.2		761.4	P	836.4	418.7	819.4	818.4	6
7	876.4	438.7		858.4	P	739.4		722.3	721.3	5
8	1,043.4	522.2		1,025.4	S+80	642.3		625.3	624.3	4
9	1,130.5	565.7		1,112.5	S	475.3		458.3	457.3	3
10	1,227.5	614.3		1,209.5	P	388.3		371.2		2
11	1,517.7	759.4	1,500.7	1,499.7	K+144	291.2		274.2		1

AAK1_HUMAN: VGpSLTPPSpSPK



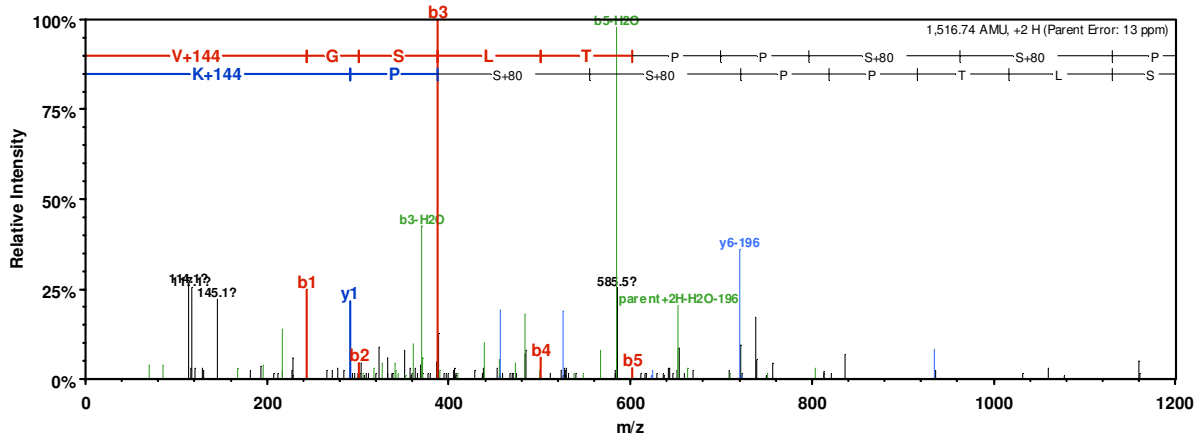
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,517.7	759.4	1,500.7	1,499.7	11
2	301.2				G	1,274.6	637.8	1,257.5	1,256.5	10
3	468.2			450.2	S+80	1,217.5	609.3	1,200.5	1,199.5	9
4	581.3			563.3	L	1,050.5	525.8	1,033.5	1,032.5	8
5	682.3			664.3	T	937.5	469.2	920.4	919.4	7
6	779.4	390.2		761.4	P	836.4	418.7	819.4	818.4	6
7	876.4	438.7		858.4	P	739.4		722.3	721.3	5
8	963.5	482.2		945.5	S	642.3		625.3	624.3	4
9	1,130.5	565.7		1,112.5	S+80	555.3		538.2	537.3	3
10	1,227.5	614.3		1,209.5	P	388.3		371.2		2
11	1,517.7	759.4	1,500.7	1,499.7	K+144	291.2		274.2		1

AAK1_HUMAN: VGSLpTPPSpSPK



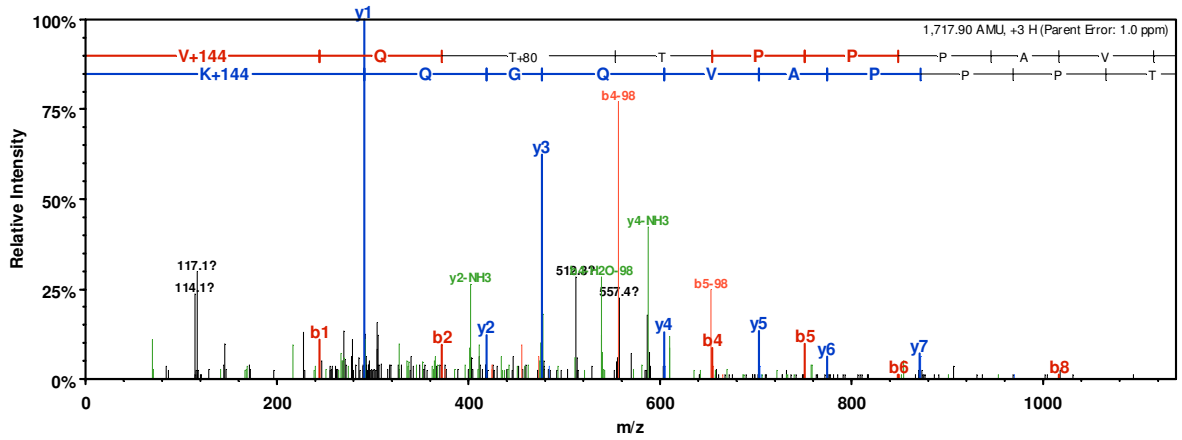
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,517.7	759.4	1,500.7	1,499.7	11
2	301.2				G	1,274.6	637.8	1,257.5	1,256.5	10
3	388.2			370.2	S	1,217.5	609.3	1,200.5	1,199.5	9
4	501.3			483.3	L	1,130.5	565.8	1,113.5	1,112.5	8
5	682.3			664.3	T+80	1,017.4	509.2	1,000.4	999.4	7
6	779.4	390.2		761.4	P	836.4	418.7	819.4	818.4	6
7	876.4	438.7		858.4	P	739.4		722.3	721.3	5
8	963.5	482.2		945.5	S	642.3		625.3	624.3	4
9	1,130.5	565.7		1,112.5	S+80	555.3		538.2	537.3	3
10	1,227.5	614.3		1,209.5	P	388.3		371.2		2
11	1,517.7	759.4	1,500.7	1,499.7	K+144	291.2		274.2		1

AAK1_HUMAN: VGSLTPPpSpSPK



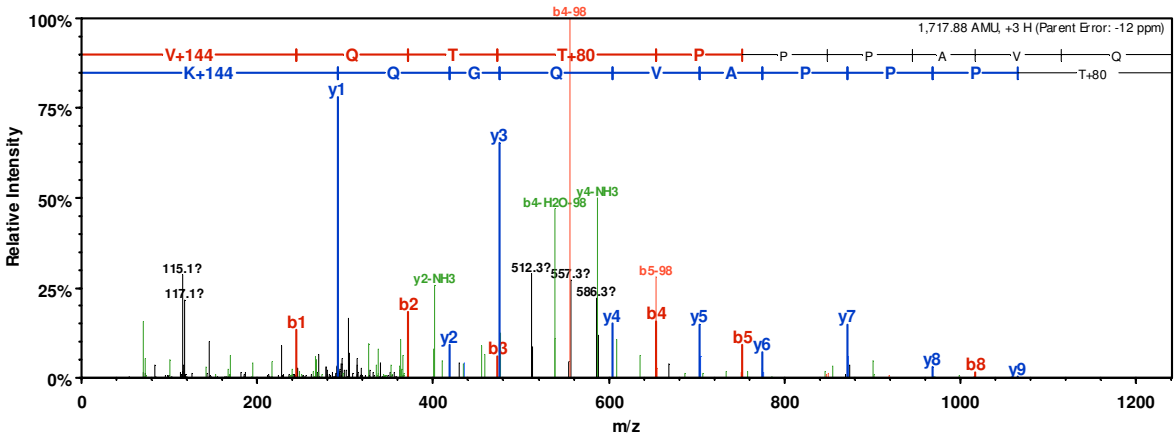
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,517.7	759.4	1,500.7	1,499.7	11
2	301.2				G	1,274.6	637.8	1,257.5	1,256.5	10
3	388.2			370.2	S	1,217.5	609.3	1,200.5	1,199.5	9
4	501.3			483.3	L	1,130.5	565.8	1,113.5	1,112.5	8
5	602.4			584.4	T	1,017.4	509.2	1,000.4	999.4	7
6	699.4	350.2		681.4	P	916.4	458.7	899.3	898.4	6
7	796.5	398.7		778.5	P	819.3		802.3	801.3	5
8	963.5	482.2		945.5	S+80	722.3		705.2	704.3	4
9	1,130.5	565.7		1,112.5	S+80	555.3		538.2	537.3	3
10	1,227.5	614.3		1,209.5	P	388.3		371.2		2
11	1,517.7	759.4	1,500.7	1,499.7	K+144	291.2		274.2		1

AAK1_HUMAN: VQpTTPPPAVQGQK



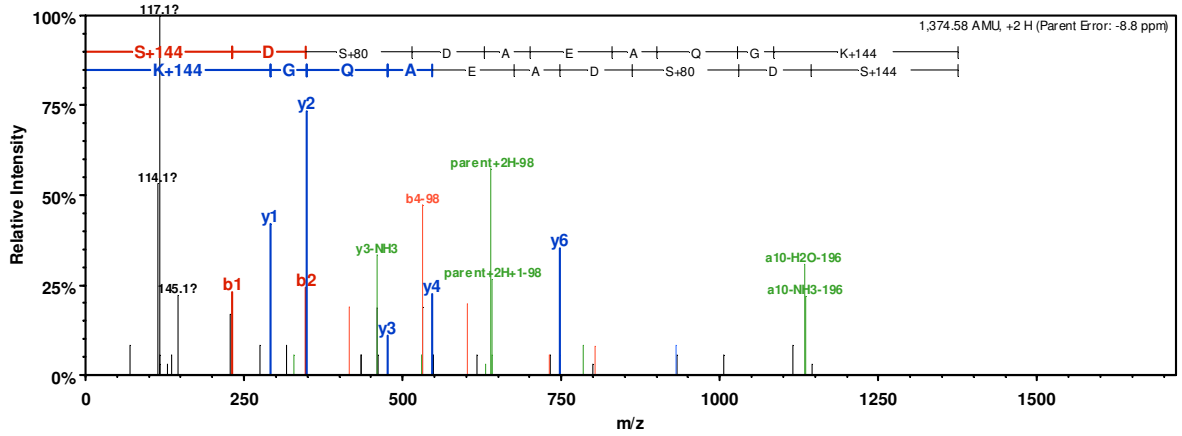
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,718.9	860.0	1,701.9	1,700.9	13
2	372.2		355.2		Q	1,475.7	738.4	1,458.7	1,457.7	12
3	553.3		536.2	535.2	T+80	1,347.7	674.3	1,330.7	1,329.7	11
4	654.3		637.3	636.3	T	1,166.7	583.8	1,149.6	1,148.7	10
5	751.4		734.3	733.3	P	1,065.6	533.3	1,048.6		9
6	848.4	424.7	831.4	830.4	P	968.6	484.8	951.5		8
7	945.5	473.2	928.4	927.4	P	871.5	436.3	854.5		7
8	1,016.5	508.8	999.5	998.5	A	774.5	387.7	757.4		6
9	1,115.6	558.3	1,098.5	1,097.6	V	703.4		686.4		5
10	1,243.6	622.3	1,226.6	1,225.6	Q	604.4		587.3		4
11	1,300.6	650.8	1,283.6	1,282.6	G	476.3		459.3		3
12	1,428.7	714.9	1,411.7	1,410.7	Q	419.3		402.2		2
13	1,718.9	860.0	1,701.9	1,700.9	K+144	291.2		274.2		1

AAK1_HUMAN: VQTpTPPPAVQGQK



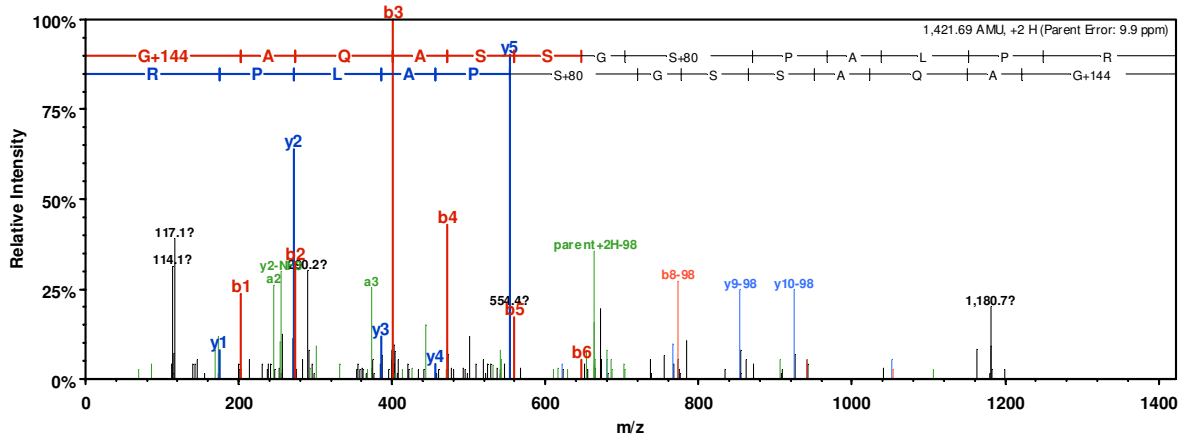
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,718.9	860.0	1,701.9	1,700.9	13
2	372.2		355.2		Q	1,475.7	738.4	1,458.7	1,457.7	12
3	473.3		456.3	455.3	T	1,347.7	674.3	1,330.7	1,329.7	11
4	654.3		637.3	636.3	T+80	1,246.6	623.8	1,229.6	1,228.6	10
5	751.4		734.3	733.3	P	1,065.6	533.3	1,048.6		9
6	848.4	424.7	831.4	830.4	P	968.6	484.8	951.5		8
7	945.5	473.2	928.4	927.4	P	871.5	436.3	854.5		7
8	1,016.5	508.8	999.5	998.5	A	774.5	387.7	757.4		6
9	1,115.6	558.3	1,098.5	1,097.6	V	703.4		686.4		5
10	1,243.6	622.3	1,226.6	1,225.6	Q	604.4		587.3		4
11	1,300.6	650.8	1,283.6	1,282.6	G	476.3		459.3		3
12	1,428.7	714.9	1,411.7	1,410.7	Q	419.3		402.2		2
13	1,718.9	860.0	1,701.9	1,700.9	K+144	291.2		274.2		1

AAPK1_HUMAN: SDpSDAEAQGK



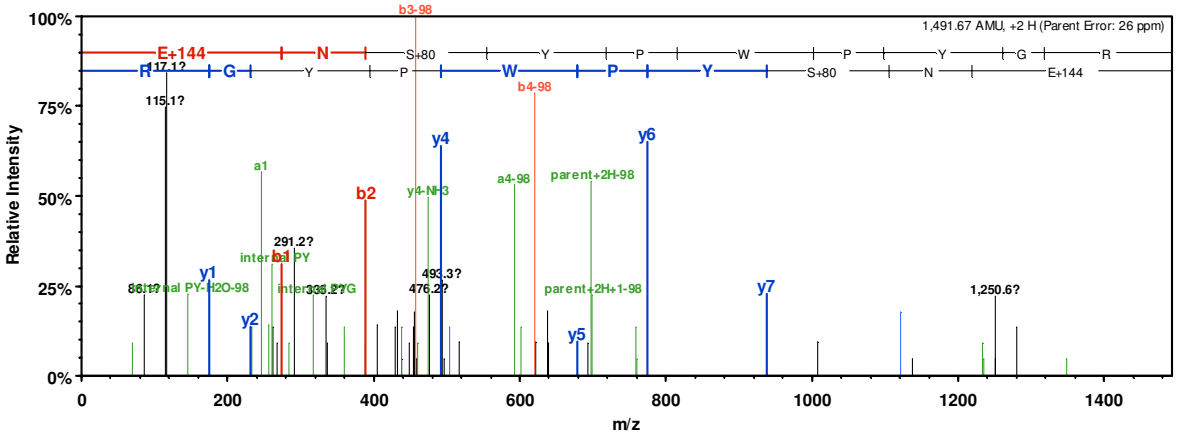
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,375.6	688.3	1,358.6	1,357.6	10
2	347.2			329.2	D	1,144.5	572.7	1,127.4	1,126.5	9
3	514.2			496.2	S+80	1,029.4	515.2	1,012.4	1,011.4	8
4	629.2			611.2	D	862.4	431.7	845.4	844.4	7
5	700.2			682.2	A	747.4	374.2	730.4	729.4	6
6	829.3	415.1		811.3	E	676.4		659.3	658.4	5
7	900.3	450.7		882.3	A	547.3		530.3		4
8	1,028.4	514.7	1,011.3	1,010.4	Q	476.3		459.3		3
9	1,085.4	543.2	1,068.4	1,067.4	G	348.2		331.2		2
10	1,375.6	688.3	1,358.6	1,357.6	K+144	291.2		274.2		1

ABL2_HUMAN: GAQASSGpSPALPR



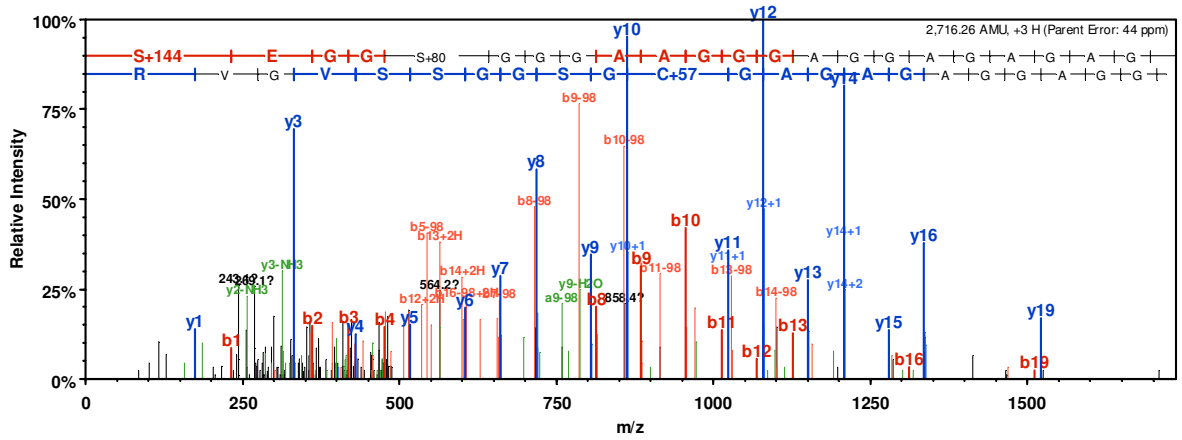
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,422.7	711.8	1,405.7	1,404.7	13
2	273.2				A	1,221.6	611.3	1,204.5	1,203.6	12
3	401.2		384.2		Q	1,150.5	575.8	1,133.5	1,132.5	11
4	472.3		455.2		A	1,022.5	511.7	1,005.4	1,004.5	10
5	559.3		542.3	541.3	S	951.4	476.2	934.4	933.4	9
6	646.3	323.7	629.3	628.3	S	864.4	432.7	847.4	846.4	8
7	703.3	352.2	686.3	685.3	G	777.4	389.2	760.3	759.4	7
8	870.3	435.7	853.3	852.3	S+80	720.3	360.7	703.3	702.3	6
9	967.4	484.2	950.4	949.4	P	553.3		536.3		5
10	1,038.4	519.7	1,021.4	1,020.4	A	456.3		439.3		4
11	1,151.5	576.3	1,134.5	1,133.5	L	385.3		368.2		3
12	1,248.6	624.8	1,231.5	1,230.6	P	272.2		255.1		2
13	1,422.7	711.8	1,405.7	1,404.7	R	175.1		158.1		1

AURKB_HUMAN: ENpSYPWPYGR



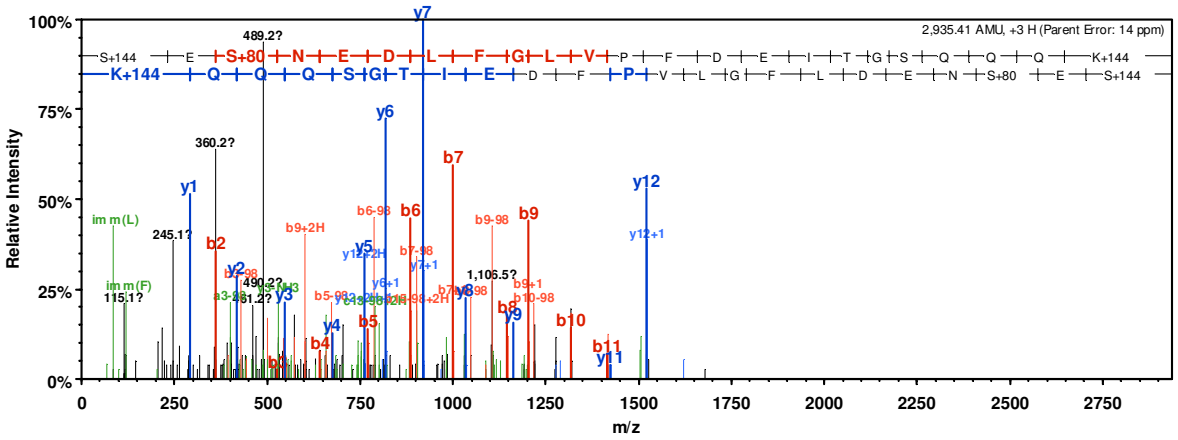
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	274.2			256.1	E+144	1,492.6	746.8	1,475.6	1,474.6	10
2	388.2		371.2	370.2	N	1,219.5	610.3	1,202.5	1,201.5	9
3	555.2		538.2	537.2	S+80	1,105.5	553.2	1,088.4	1,087.4	8
4	718.3		701.2	700.2	Y	938.5	469.7	921.4		7
5	815.3		798.3	797.3	P	775.4	388.2	758.4		6
6	1,001.4	501.2	984.4	983.4	W	678.3		661.3		5
7	1,098.4	549.7	1,081.4	1,080.4	P	492.3		475.2		4
8	1,261.5	631.3	1,244.5	1,243.5	Y	395.2		378.2		3
9	1,318.5	659.8	1,301.5	1,300.5	G	232.1		215.1		2
10	1,492.6	746.8	1,475.6	1,474.6	R	175.1		158.1		1

BMP2K_HUMAN: SEGGpSGGGAAGGGAGGAGAGAGCGSGGSSVGVR



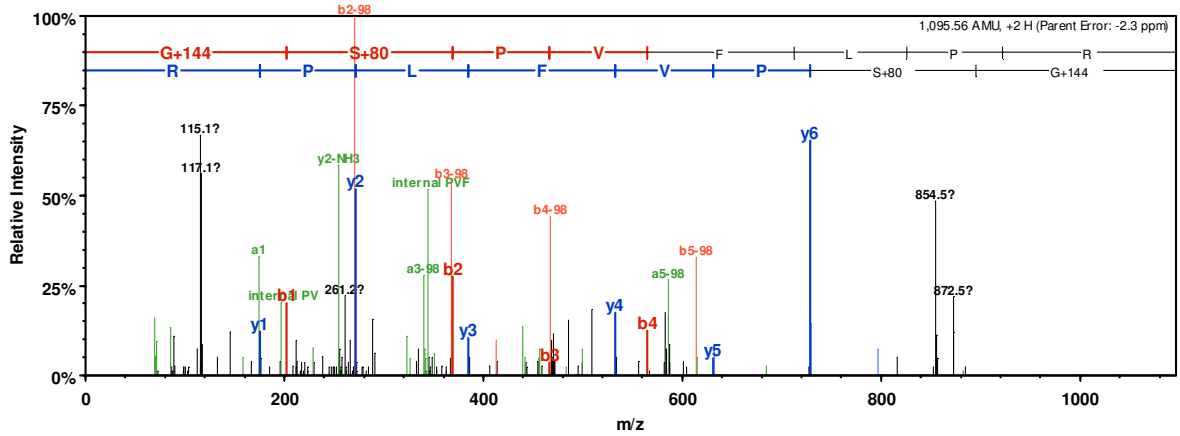
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	2,717.1	1,359.1	2,700.1	2,699.1	33
2	361.2			343.2	E	2,486.0	1,243.5	2,469.0	2,468.0	32
3	418.2			400.2	G	2,357.0	1,179.0	2,339.9	2,339.0	31
4	475.2			457.2	G	2,299.9	1,150.5	2,282.9	2,281.9	30
5	642.2			624.2	S+80	2,242.9	1,122.0	2,225.9	2,224.9	29
6	699.2	350.1		681.2	G	2,075.9	1,038.5	2,058.9	2,057.9	28
7	756.3	378.6		738.3	G	2,018.9	1,010.0	2,001.9	2,000.9	27
8	813.3	407.1		795.3	G	1,961.9	981.4	1,944.9	1,943.9	26
9	884.3	442.7		866.3	A	1,904.9	952.9	1,887.8	1,886.9	25
10	955.4	478.2		937.4	A	1,833.8	917.4	1,816.8	1,815.8	24
11	1,012.4	506.7		994.4	G	1,762.8	881.9	1,745.8	1,744.8	23
12	1,069.4	535.2		1,051.4	G	1,705.8	853.4	1,688.7	1,687.8	22
13	1,126.4	563.7		1,108.4	G	1,648.7	824.9	1,631.7	1,630.7	21
14	1,197.5	599.2		1,179.5	A	1,591.7	796.4	1,574.7	1,573.7	20
15	1,254.5	627.7		1,236.5	G	1,520.7	760.8	1,503.7	1,502.7	19
16	1,311.5	656.3		1,293.5	G	1,463.7	732.3	1,446.6	1,445.7	18
17	1,382.5	691.8		1,364.5	A	1,406.6	703.8	1,389.6	1,388.6	17
18	1,439.6	720.3		1,421.6	G	1,335.6	668.3	1,318.6	1,317.6	16
19	1,510.6	755.8		1,492.6	A	1,278.6	639.8	1,261.6	1,260.6	15
20	1,567.6	784.3		1,549.6	G	1,207.5	604.3	1,190.5	1,189.5	14
21	1,638.7	819.8		1,620.7	A	1,150.5	575.8	1,133.5	1,132.5	13
22	1,695.7	848.3		1,677.7	G	1,079.5	540.2	1,062.5	1,061.5	12
23	1,855.7	928.4		1,837.7	C+57	1,022.5	511.7	1,005.4	1,004.5	11
24	1,912.7	956.9		1,894.7	G	862.4	431.7	845.4	844.4	10
25	1,999.8	1,000.4		1,981.8	S	805.4	403.2	788.4	787.4	9
26	2,056.8	1,028.9		2,038.8	G	718.4	359.7	701.4	700.4	8
27	2,113.8	1,057.4		2,095.8	G	661.4	331.2	644.3	643.4	7
28	2,200.8	1,100.9		2,182.8	S	604.3	302.7	587.3	586.3	6
29	2,287.9	1,144.4		2,269.9	S	517.3		500.3	499.3	5
30	2,386.9	1,194.0		2,368.9	V	430.3		413.3		4
31	2,444.0	1,222.5		2,426.0	G	331.2		314.2		3
32	2,543.0	1,272.0		2,525.0	V	274.2		257.2		2
33	2,717.1	1,359.1	2,700.1	2,699.1	R	175.1		158.1		1

BMP2K_HUMAN: SEpSNEDLFGLVPFDEITGSQQQK



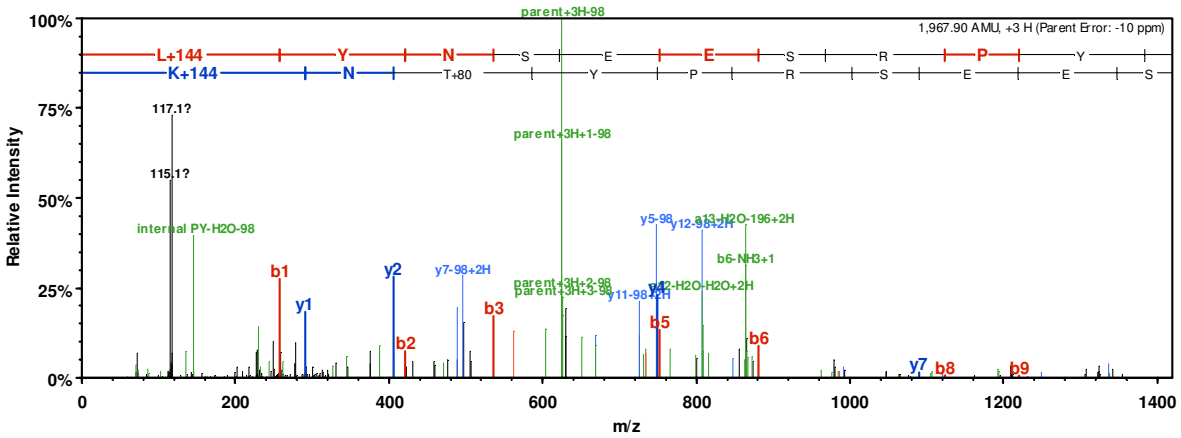
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	2,936.4	1,468.7	2,919.4	2,918.4	23
2	361.2			343.2	E	2,705.2	1,353.1	2,688.2	2,687.2	22
3	528.2			510.2	S+80	2,576.2	1,288.6	2,559.2	2,558.2	21
4	642.2		625.2	624.2	N	2,409.2	1,205.1	2,392.2	2,391.2	20
5	771.3		754.2	753.3	E	2,295.2	1,148.1	2,278.1	2,277.2	19
6	886.3	443.7	869.3	868.3	D	2,166.1	1,083.6	2,149.1	2,148.1	18
7	999.4	500.2	982.4	981.4	L	2,051.1	1,026.1	2,034.1	2,033.1	17
8	1,146.4	573.7	1,129.4	1,128.4	F	1,938.0	969.5	1,921.0	1,920.0	16
9	1,203.5	602.2	1,186.4	1,185.5	G	1,790.9	896.0	1,773.9	1,772.9	15
10	1,316.6	658.8	1,299.5	1,298.5	L	1,733.9	867.5	1,716.9	1,715.9	14
11	1,415.6	708.3	1,398.6	1,397.6	V	1,620.8	810.9	1,603.8	1,602.8	13
12	1,512.7	756.8	1,495.6	1,494.7	P	1,521.8	761.4	1,504.7	1,503.8	12
13	1,659.7	830.4	1,642.7	1,641.7	F	1,424.7	712.9	1,407.7	1,406.7	11
14	1,774.8	887.9	1,757.7	1,756.8	D	1,277.6	639.3	1,260.6	1,259.6	10
15	1,903.8	952.4	1,886.8	1,885.8	E	1,162.6	581.8	1,145.6	1,144.6	9
16	2,016.9	1,009.0	1,999.9	1,998.9	I	1,033.6	517.3	1,016.5	1,015.6	8
17	2,117.9	1,059.5	2,100.9	2,099.9	T	920.5	460.8	903.5	902.5	7
18	2,175.0	1,088.0	2,157.9	2,157.0	G	819.4	410.2	802.4	801.4	6
19	2,262.0	1,131.5	2,245.0	2,244.0	S	762.4		745.4	744.4	5
20	2,390.1	1,195.5	2,373.0	2,372.0	Q	675.4		658.4		4
21	2,518.1	1,259.6	2,501.1	2,500.1	Q	547.3		530.3		3
22	2,646.2	1,323.6	2,629.1	2,628.2	Q	419.3		402.2		2
23	2,936.4	1,468.7	2,919.4	2,918.4	K+144	291.2		274.2		1

CD2L7_HUMAN: GpSPVFLPR



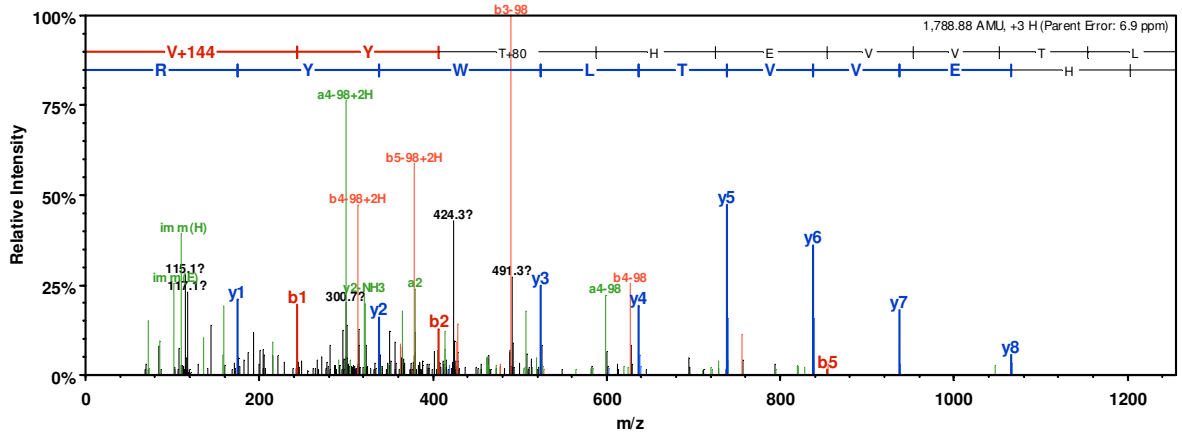
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,096.6	548.8	1,079.5	1,078.6	8
2	369.1			351.1	S+80	895.4	448.2	878.4	877.4	7
3	466.2			448.2	P	728.4	364.7	711.4		6
4	565.3			547.2	V	631.4		614.4		5
5	712.3			694.3	F	532.3		515.3		4
6	825.4	413.2		807.4	L	385.3		368.2		3
7	922.5	461.7		904.4	P	272.2		255.1		2
8	1,096.6	548.8	1,079.5	1,078.6	R	175.1		158.1		1

CD2L7_HUMAN: LYNSEESRPYpTNK



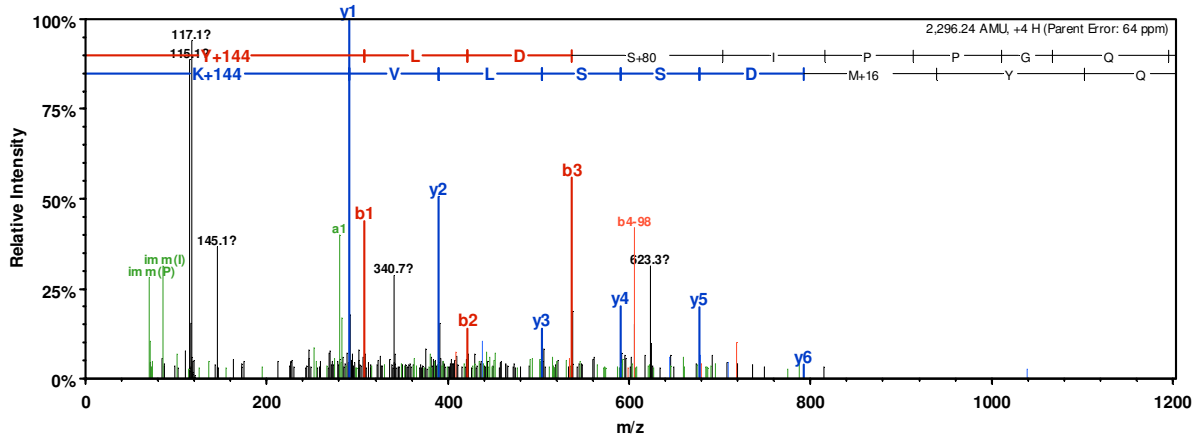
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				L+144	1,968.9	985.0	1,951.9	1,950.9	13
2	421.3				Y	1,711.7	856.4	1,694.7	1,693.7	12
3	535.3		518.3		N	1,548.7	774.8	1,531.7	1,530.7	11
4	622.3		605.3	604.3	S	1,434.6	717.8	1,417.6	1,416.6	10
5	751.4		734.3	733.4	E	1,347.6	674.3	1,330.6	1,329.6	9
6	880.4	440.7	863.4	862.4	E	1,218.6	609.8	1,201.5	1,200.6	8
7	967.4	484.2	950.4	949.4	S	1,089.5	545.3	1,072.5	1,071.5	7
8	1,123.6	562.3	1,106.5	1,105.5	R	1,002.5	501.7	985.5	984.5	6
9	1,220.6	610.8	1,203.6	1,202.6	P	846.4		829.4	828.4	5
10	1,383.7	692.3	1,366.6	1,365.7	Y	749.3		732.3	731.3	4
11	1,564.7	782.8	1,547.7	1,546.7	T+80	586.3		569.2	568.3	3
12	1,678.7	839.9	1,661.7	1,660.7	N	405.3		388.2		2
13	1,968.9	985.0	1,951.9	1,950.9	K+144	291.2		274.2		1

CDC2_HUMAN: VYpTHEVVTLWYR



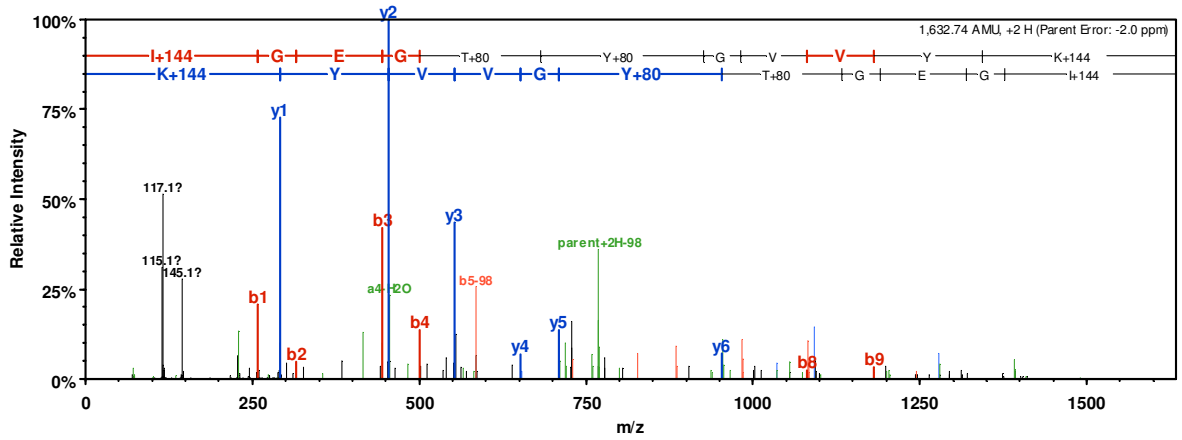
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,789.9	895.4	1,772.9	1,771.9	12
2	407.2				Y	1,546.7	773.9	1,529.7	1,528.7	11
3	588.3			570.2	T+80	1,383.6	692.3	1,366.6	1,365.6	10
4	725.3	363.2		707.3	H	1,202.6	601.8	1,185.6	1,184.6	9
5	854.4	427.7		836.3	E	1,065.6	533.3	1,048.5	1,047.6	8
6	953.4	477.2		935.4	V	936.5	468.8	919.5	918.5	7
7	1,052.5	526.8		1,034.5	V	837.5	419.2	820.4	819.5	6
8	1,153.5	577.3		1,135.5	T	738.4		721.4	720.4	5
9	1,266.6	633.8		1,248.6	L	637.3		620.3		4
10	1,452.7	726.9		1,434.7	W	524.3		507.2		3
11	1,615.8	808.4		1,597.8	Y	338.2		321.2		2
12	1,789.9	895.4	1,772.9	1,771.9	R	175.1		158.1		1

CDC2_HUMAN: YLDpSIPPGQYMDSSLVK



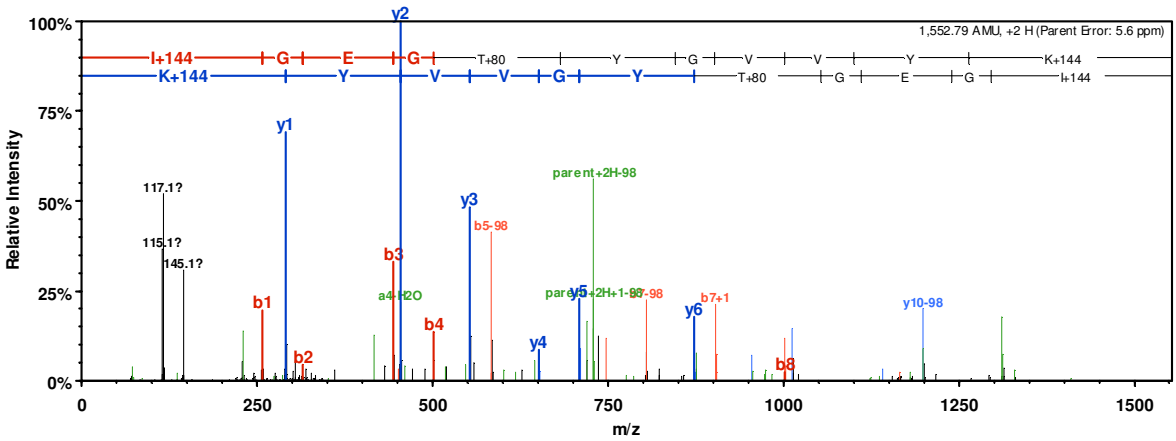
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	308.2				Y+144	2,297.1	1,149.1	2,280.1	2,279.1	17
2	421.3				L	1,989.9	995.5	1,972.9	1,971.9	16
3	536.3			518.3	D	1,876.9	938.9	1,859.8	1,858.8	15
4	703.3			685.3	S+80	1,761.8	881.4	1,744.8	1,743.8	14
5	816.4			798.4	I	1,594.8	797.9	1,577.8	1,576.8	13
6	913.4	457.2		895.4	P	1,481.7	741.4	1,464.7	1,463.7	12
7	1,010.5	505.7		992.5	P	1,384.7	692.8	1,367.7	1,366.7	11
8	1,067.5	534.3		1,049.5	G	1,287.6	644.3	1,270.6	1,269.6	10
9	1,195.6	598.3	1,178.5	1,177.5	Q	1,230.6	615.8	1,213.6	1,212.6	9
10	1,358.6	679.8	1,341.6	1,340.6	Y	1,102.6	551.8	1,085.5	1,084.5	8
11	1,505.7	753.3	1,488.6	1,487.6	M+16	939.5	470.3	922.5	921.5	7
12	1,620.7	810.8	1,603.7	1,602.7	D	792.5	396.7	775.4	774.4	6
13	1,707.7	854.4	1,690.7	1,689.7	S	677.4		660.4	659.4	5
14	1,794.7	897.9	1,777.7	1,776.7	S	590.4		573.4	572.4	4
15	1,907.8	954.4	1,890.8	1,889.8	L	503.4		486.3		3
16	2,006.9	1,004.0	1,989.9	1,988.9	V	390.3		373.3		2
17	2,297.1	1,149.1	2,280.1	2,279.1	K+144	291.2		274.2		1

CDK2_HUMAN: IGEGpTpYGVVYK



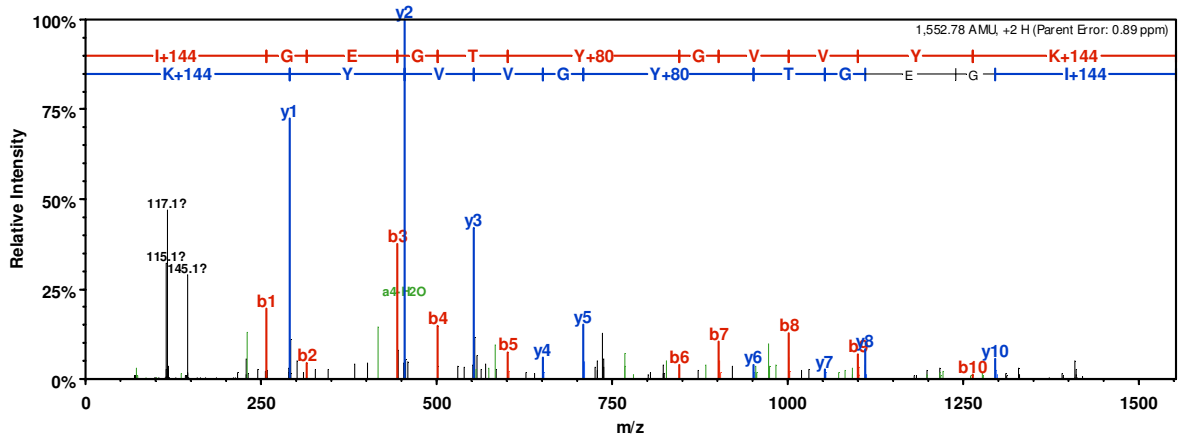
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				I+144	1,633.8	817.4	1,616.7	1,615.7	11
2	315.2				G	1,376.6	688.8	1,359.5	1,358.6	10
3	444.3			426.2	E	1,319.5	660.3	1,302.5	1,301.5	9
4	501.3			483.3	G	1,190.5	595.8	1,173.5	1,172.5	8
5	682.3			664.3	T+80	1,133.5	567.2	1,116.5	1,115.5	7
6	925.3	463.2		907.3	Y+80	952.5	476.7	935.4		6
7	982.3	491.7		964.3	G	709.4		692.4		5
8	1,081.4	541.2		1,063.4	V	652.4		635.4		4
9	1,180.5	590.7		1,162.5	V	553.3		536.3		3
10	1,343.5	672.3		1,325.5	Y	454.3		437.3		2
11	1,633.8	817.4	1,616.7	1,615.7	K+144	291.2		274.2		1

CDK2_HUMAN: IGEGpTYGVVYK



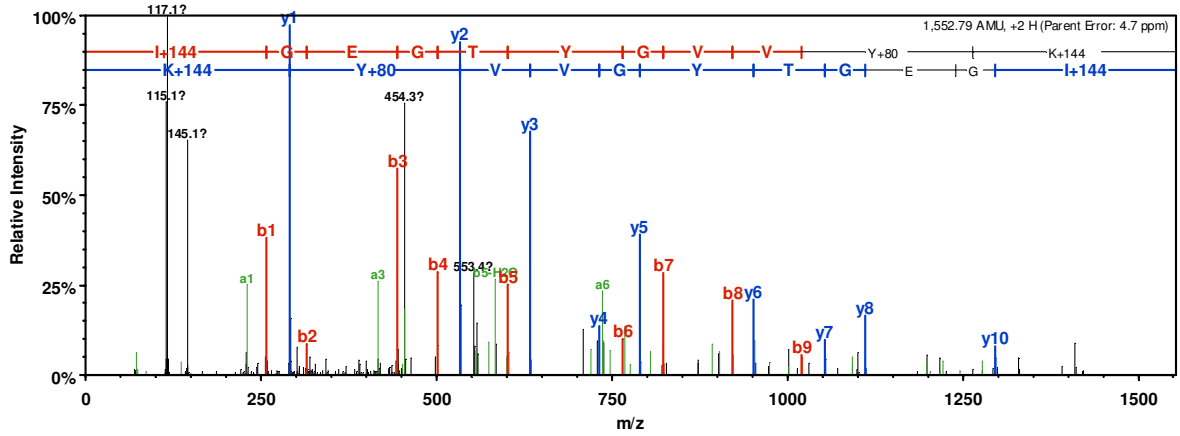
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				I+144	1,553.8	777.4	1,536.8	1,535.8	11
2	315.2				G	1,296.6	648.8	1,279.6	1,278.6	10
3	444.3			426.2	E	1,239.6	620.3	1,222.6	1,221.6	9
4	501.3			483.3	G	1,110.5	555.8	1,093.5	1,092.5	8
5	682.3			664.3	T+80	1,053.5	527.3	1,036.5	1,035.5	7
6	845.4	423.2		827.3	Y	872.5	436.8	855.5		6
7	902.4	451.7		884.4	G	709.4		692.4		5
8	1,001.4	501.2		983.4	V	652.4		635.4		4
9	1,100.5	550.8		1,082.5	V	553.3		536.3		3
10	1,263.6	632.3		1,245.6	Y	454.3		437.3		2
11	1,553.8	777.4	1,536.8	1,535.8	K+144	291.2		274.2		1

CDK2_HUMAN: IGEGTpYGVVYK



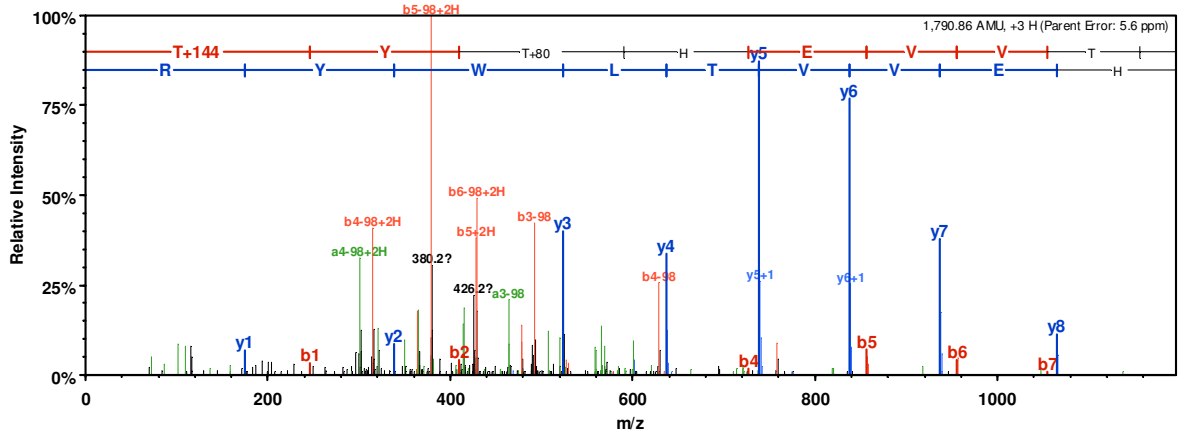
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				I+144	1,553.8	777.4	1,536.8	1,535.8	11
2	315.2				G	1,296.6	648.8	1,279.6	1,278.6	10
3	444.3			426.2	E	1,239.6	620.3	1,222.6	1,221.6	9
4	501.3			483.3	G	1,110.5	555.8	1,093.5	1,092.5	8
5	602.3			584.3	T	1,053.5	527.3	1,036.5	1,035.5	7
6	845.4	423.2		827.3	Y+80	952.5	476.7	935.4		6
7	902.4	451.7		884.4	G	709.4		692.4		5
8	1,001.4	501.2		983.4	V	652.4		635.4		4
9	1,100.5	550.8		1,082.5	V	553.3		536.3		3
10	1,263.6	632.3		1,245.6	Y	454.3		437.3		2
11	1,553.8	777.4	1,536.8	1,535.8	K+144	291.2		274.2		1

CDK2_HUMAN: IGEGTYGVVpYK



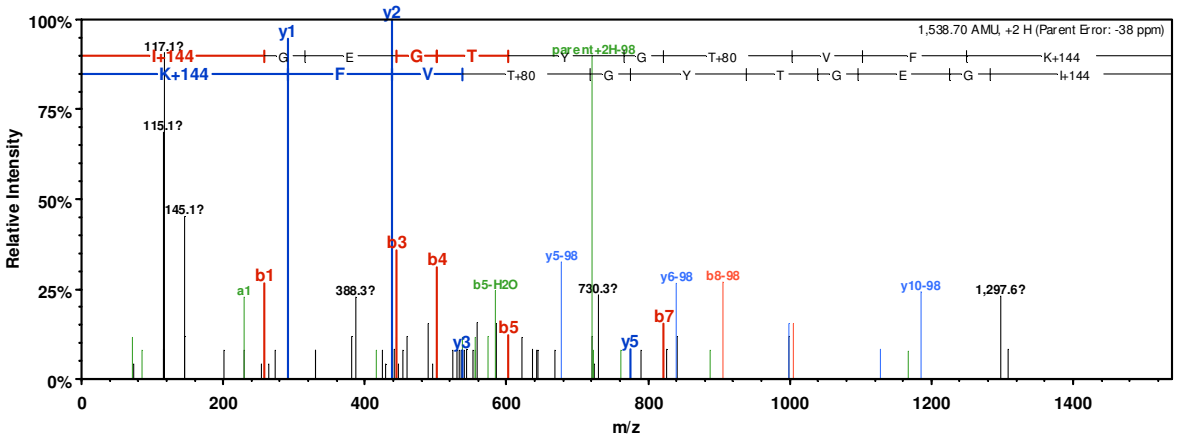
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				I+144	1,553.8	777.4	1,536.8	1,535.8	11
2	315.2				G	1,296.6	648.8	1,279.6	1,278.6	10
3	444.3			426.2	E	1,239.6	620.3	1,222.6	1,221.6	9
4	501.3			483.3	G	1,110.5	555.8	1,093.5	1,092.5	8
5	602.3			584.3	T	1,053.5	527.3	1,036.5	1,035.5	7
6	765.4	383.2		747.4	Y	952.5	476.7	935.4		6
7	822.4	411.7		804.4	G	789.4		772.4		5
8	921.5	461.2		903.5	V	732.4		715.4		4
9	1,020.5	510.8		1,002.5	V	633.3		616.3		3
10	1,263.6	632.3		1,245.6	Y+80	534.2		517.2		2
11	1,553.8	777.4	1,536.8	1,535.8	K+144	291.2		274.2		1

CDK2_HUMAN: TYpTHEVVTLWYR



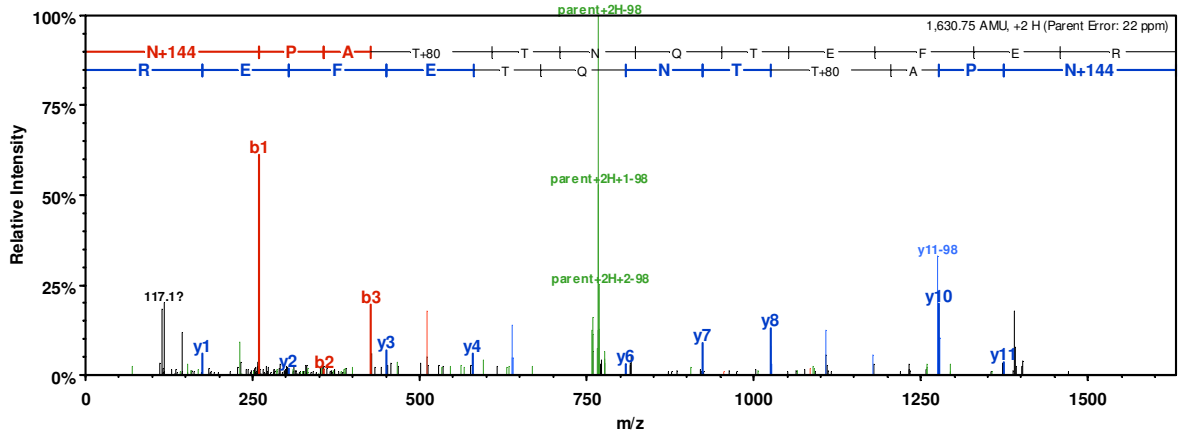
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	246.2			228.1	T+144	1,791.9	896.4	1,774.8	1,773.8	12
2	409.2			391.2	Y	1,546.7	773.9	1,529.7	1,528.7	11
3	590.2			572.2	T+80	1,383.6	692.3	1,366.6	1,365.6	10
4	727.3	364.2		709.3	H	1,202.6	601.8	1,185.6	1,184.6	9
5	856.3	428.7		838.3	E	1,065.6	533.3	1,048.5	1,047.6	8
6	955.4	478.2		937.4	V	936.5	468.8	919.5	918.5	7
7	1,054.5	527.7		1,036.5	V	837.5	419.2	820.4	819.5	6
8	1,155.5	578.3		1,137.5	T	738.4		721.4	720.4	5
9	1,268.6	634.8		1,250.6	L	637.3		620.3		4
10	1,454.7	727.8		1,436.7	W	524.3		507.2		3
11	1,617.7	809.4		1,599.7	Y	338.2		321.2		2
12	1,791.9	896.4	1,774.8	1,773.8	R	175.1		158.1		1

CDK5_HUMAN: IGEGTYGpTVFK



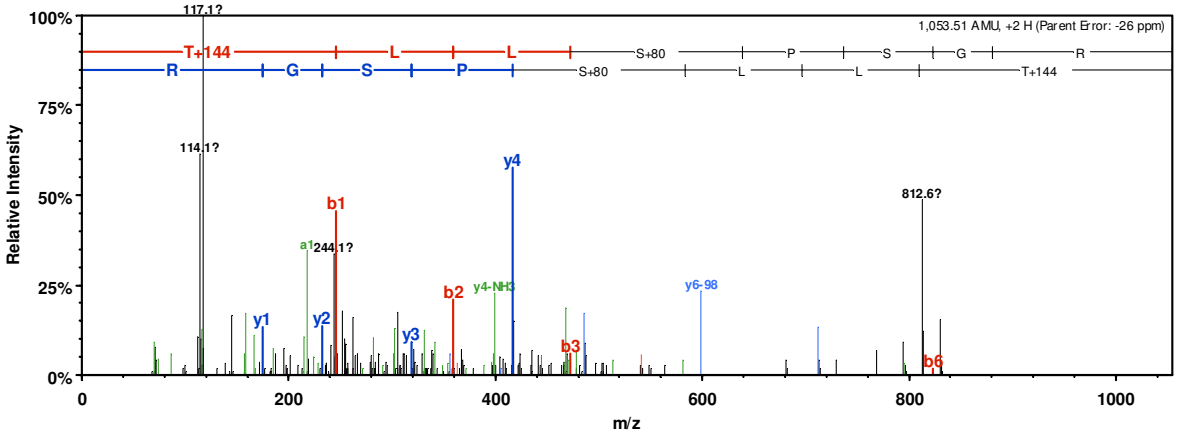
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				I+144	1,539.8	770.4	1,522.7	1,521.8	11
2	315.2				G	1,282.6	641.8	1,265.6	1,264.6	10
3	444.3			426.2	E	1,225.6	613.3	1,208.5	1,207.6	9
4	501.3			483.3	G	1,096.5	548.8	1,079.5	1,078.5	8
5	602.3			584.3	T	1,039.5	520.3	1,022.5	1,021.5	7
6	765.4	383.2		747.4	Y	938.5	469.7	921.4	920.4	6
7	822.4	411.7		804.4	G	775.4		758.4	757.4	5
8	1,003.4	502.2		985.4	T+80	718.4		701.3	700.4	4
9	1,102.5	551.8		1,084.5	V	537.4		520.3		3
10	1,249.6	625.3		1,231.6	F	438.3		421.3		2
11	1,539.8	770.4	1,522.7	1,521.8	K+144	291.2		274.2		1

CDK9_HUMAN: NPApTTNQTEFER



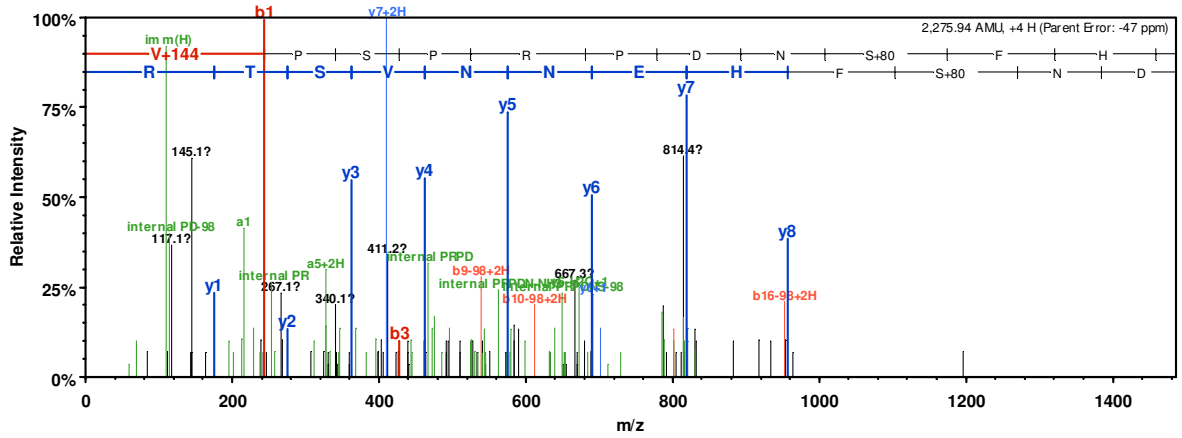
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	259.2		242.1		N+144	1,631.7	816.4	1,614.7	1,613.7	12
2	356.2		339.2		P	1,373.6	687.3	1,356.5	1,355.6	11
3	427.2		410.2		A	1,276.5	638.8	1,259.5	1,258.5	10
4	608.3		591.2	590.2	T+80	1,205.5	603.2	1,188.5	1,187.5	9
5	709.3		692.3	691.3	T	1,024.5	512.7	1,007.4	1,006.5	8
6	823.3	412.2	806.3	805.3	N	923.4	462.2	906.4	905.4	7
7	951.4	476.2	934.4	933.4	Q	809.4	405.2	792.4	791.4	6
8	1,052.5	526.7	1,035.4	1,034.4	T	681.3		664.3	663.3	5
9	1,181.5	591.3	1,164.5	1,163.5	E	580.3		563.2	562.3	4
10	1,328.6	664.8	1,311.5	1,310.6	F	451.2		434.2	433.2	3
11	1,457.6	729.3	1,440.6	1,439.6	E	304.2		287.1	286.2	2
12	1,631.7	816.4	1,614.7	1,613.7	R	175.1		158.1		1

CDKL5_HUMAN: TLLpSPSGR



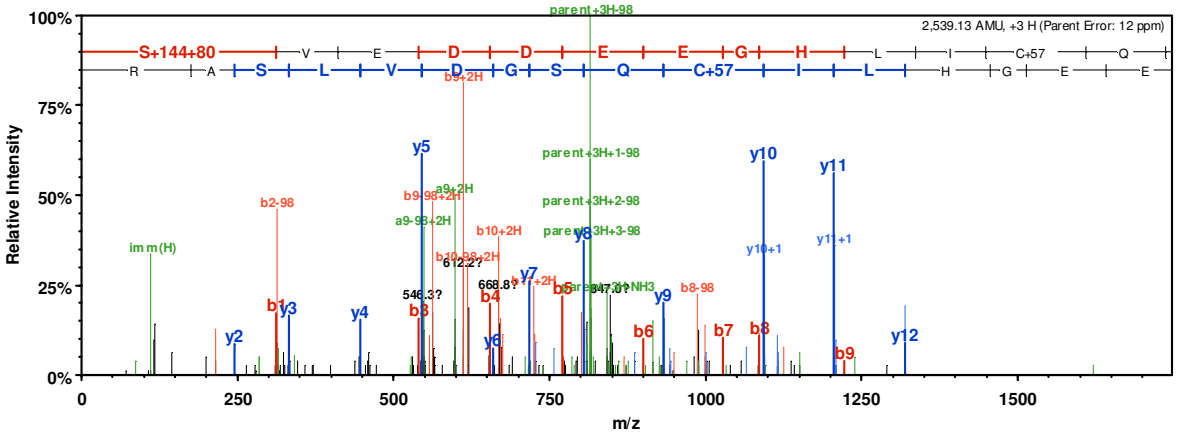
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	246.2			228.1	T+144	1,054.5	527.8	1,037.5	1,036.5	8
2	359.2			341.2	L	809.4	405.2	792.4	791.4	7
3	472.3			454.3	L	696.3	348.7	679.3	678.3	6
4	639.3			621.3	S+80	583.2		566.2	565.2	5
5	736.4			718.4	P	416.2		399.2	398.2	4
6	823.4	412.2		805.4	S	319.2		302.1	301.2	3
7	880.4	440.7		862.4	G	232.1		215.1		2
8	1,054.5	527.8	1,037.5	1,036.5	R	175.1		158.1		1

CDKL5_HUMAN: VPSPRPDNpSFHENNVSTR



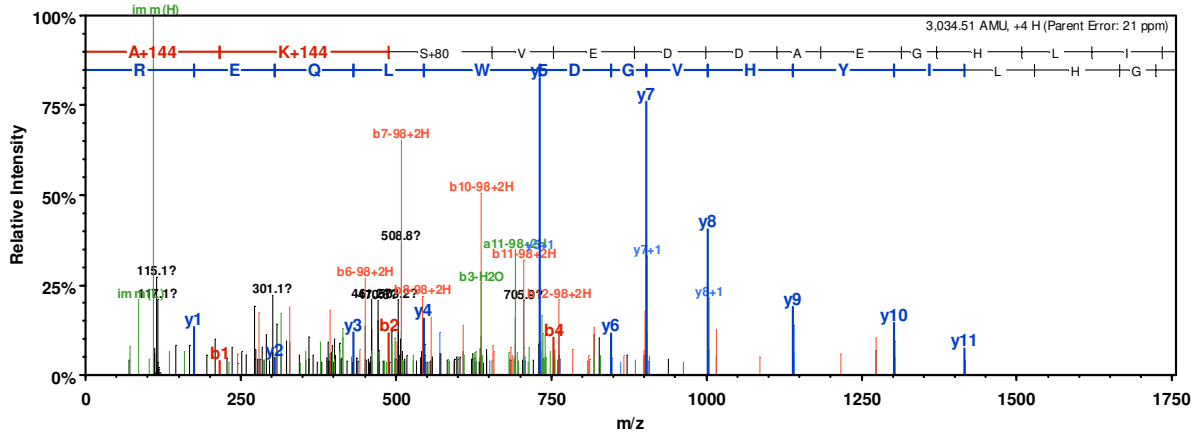
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				¥+144	2,277.1	1,139.0	2,260.0	2,259.0	18
2	341.2				P	2,033.9	1,017.4	2,016.9	2,015.9	17
3	428.3			410.3	S	1,936.8	968.9	1,919.8	1,918.8	16
4	525.3			507.3	P	1,849.8	925.4	1,832.8	1,831.8	15
5	681.4	341.2	664.4	663.4	R	1,752.7	876.9	1,735.7	1,734.7	14
6	778.5	389.7	761.4	760.5	P	1,596.6	798.8	1,579.6	1,578.6	13
7	893.5	447.3	876.5	875.5	D	1,499.6	750.3	1,482.6	1,481.6	12
8	1,007.5	504.3	990.5	989.5	N	1,384.6	692.8	1,367.5	1,366.6	11
9	1,174.5	587.8	1,157.5	1,156.5	S+80	1,270.5	635.8	1,253.5	1,252.5	10
10	1,321.6	661.3	1,304.6	1,303.6	F	1,103.5	552.3	1,086.5	1,085.5	9
11	1,458.7	729.8	1,441.6	1,440.7	H	956.5	478.7	939.4	938.4	8
12	1,587.7	794.4	1,570.7	1,569.7	E	819.4	410.2	802.4	801.4	7
13	1,701.8	851.4	1,684.7	1,683.7	N	690.4	345.7	673.3	672.3	6
14	1,815.8	908.4	1,798.8	1,797.8	N	576.3		559.3	558.3	5
15	1,914.9	957.9	1,897.8	1,896.9	¥	462.3		445.2	444.3	4
16	2,001.9	1,001.5	1,984.9	1,983.9	S	363.2		346.2	345.2	3
17	2,102.9	1,052.0	2,085.9	2,084.9	T	276.2		259.1	258.2	2
18	2,277.1	1,139.0	2,260.0	2,259.0	R	175.1		158.1		1

CLK1_HUMAN: pSVEDDEEGHLICQSGDVLSAR



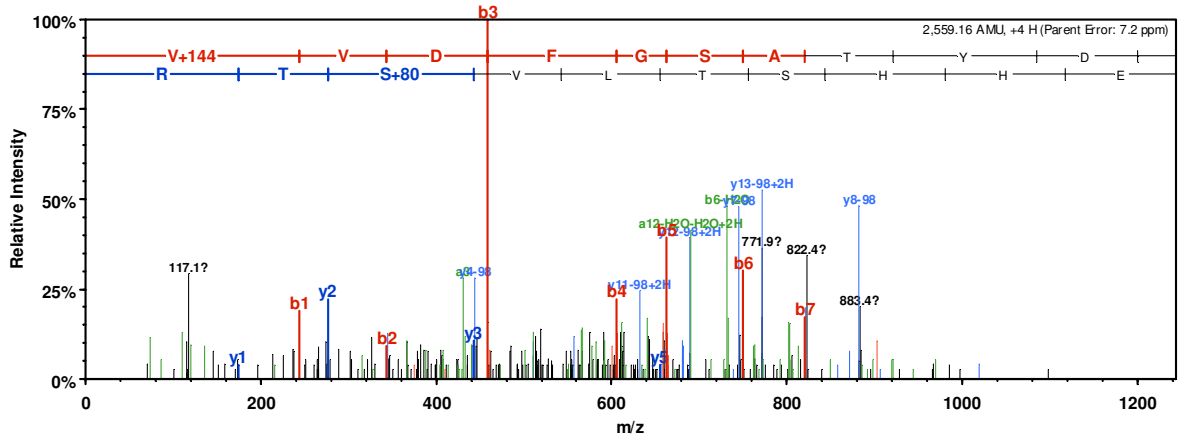
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	312.1			294.1	S+224	2,540.1	1,270.6	2,523.1	2,522.1	21
2	411.2			393.2	V	2,229.0	1,115.0	2,212.0	2,211.0	20
3	540.2			522.2	E	2,129.9	1,065.5	2,112.9	2,111.9	19
4	655.2			637.2	D	2,000.9	1,001.0	1,983.9	1,982.9	18
5	770.3			752.3	D	1,885.9	943.4	1,868.8	1,867.9	17
6	899.3	450.2		881.3	E	1,770.8	885.9	1,753.8	1,752.8	16
7	1,028.4	514.7		1,010.3	E	1,641.8	821.4	1,624.8	1,623.8	15
8	1,085.4	543.2		1,067.4	G	1,512.8	756.9	1,495.7	1,494.7	14
9	1,222.4	611.7		1,204.4	H	1,455.7	728.4	1,438.7	1,437.7	13
10	1,335.5	668.3		1,317.5	L	1,318.7	659.8	1,301.7	1,300.7	12
11	1,448.6	724.8		1,430.6	I	1,205.6	603.3	1,188.6	1,187.6	11
12	1,608.6	804.8		1,590.6	C+57	1,092.5	546.8	1,075.5	1,074.5	10
13	1,736.7	868.9	1,719.7	1,718.7	Q	932.5	466.7	915.5	914.5	9
14	1,823.7	912.4	1,806.7	1,805.7	S	804.4	402.7	787.4	786.4	8
15	1,880.7	940.9	1,863.7	1,862.7	G	717.4	359.2	700.4	699.4	7
16	1,995.8	998.4	1,978.8	1,977.8	D	660.4	330.7	643.3	642.4	6
17	2,094.8	1,047.9	2,077.8	2,076.8	V	545.3		528.3	527.3	5
18	2,207.9	1,104.5	2,190.9	2,189.9	L	446.3		429.2	428.3	4
19	2,295.0	1,148.0	2,277.9	2,277.0	S	333.2		316.2	315.2	3
20	2,366.0	1,183.5	2,349.0	2,348.0	A	246.2		229.1		2
21	2,540.1	1,270.6	2,523.1	2,522.1	R	175.1		158.1		1

CLK2_HUMAN: AKpSVEDDAEGHLIYHVGDWLQER



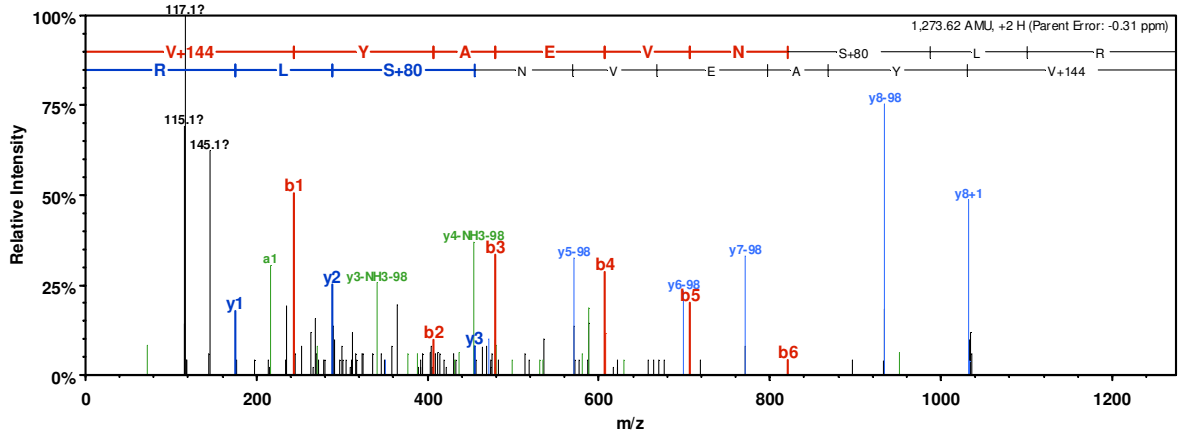
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	216.1				A+144	3,035.5	1,518.2	3,018.4	3,017.4	23
2	488.3	244.7	471.3		K+144	2,820.3	1,410.7	2,803.3	2,802.3	22
3	655.3	328.2	638.3	637.3	S+80	2,548.1	1,274.6	2,531.1	2,530.1	21
4	754.4	377.7	737.4	736.4	V	2,381.1	1,191.1	2,364.1	2,363.1	20
5	883.5	442.2	866.4	865.4	E	2,282.0	1,141.5	2,265.0	2,264.0	19
6	998.5	499.7	981.5	980.5	D	2,153.0	1,077.0	2,136.0	2,135.0	18
7	1,113.5	557.3	1,096.5	1,095.5	D	2,038.0	1,019.5	2,021.0	2,020.0	17
8	1,184.5	592.8	1,167.5	1,166.5	A	1,923.0	962.0	1,905.9	1,904.9	16
9	1,313.6	657.3	1,296.6	1,295.6	E	1,851.9	926.5	1,834.9	1,833.9	15
10	1,370.6	685.8	1,353.6	1,352.6	G	1,722.9	861.9	1,705.8	1,704.9	14
11	1,507.7	754.3	1,490.6	1,489.7	H	1,665.9	833.4	1,648.8	1,647.8	13
12	1,620.8	810.9	1,603.7	1,602.7	L	1,528.8	764.9	1,511.8	1,510.8	12
13	1,733.8	867.4	1,716.8	1,715.8	I	1,415.7	708.4	1,398.7	1,397.7	11
14	1,896.9	949.0	1,879.9	1,878.9	Y	1,302.6	651.8	1,285.6	1,284.6	10
15	2,034.0	1,017.5	2,016.9	2,015.9	H	1,139.6	570.3	1,122.5	1,121.5	9
16	2,133.0	1,067.0	2,116.0	2,115.0	V	1,002.5	501.8	985.5	984.5	8
17	2,190.0	1,095.5	2,173.0	2,172.0	G	903.4	452.2	886.4	885.4	7
18	2,305.1	1,153.0	2,288.0	2,287.1	D	846.4	423.7	829.4	828.4	6
19	2,491.2	1,246.1	2,474.1	2,473.1	W	731.4		714.4	713.4	5
20	2,604.2	1,302.6	2,587.2	2,586.2	L	545.3		528.3	527.3	4
21	2,732.3	1,366.7	2,715.3	2,714.3	Q	432.2		415.2	414.2	3
22	2,861.3	1,431.2	2,844.3	2,843.3	E	304.2		287.1	286.2	2
23	3,035.5	1,518.2	3,018.4	3,017.4	R	175.1		158.1		1

CLK4_HUMAN: VVDFGSATYDDEHHSTLVpSTR



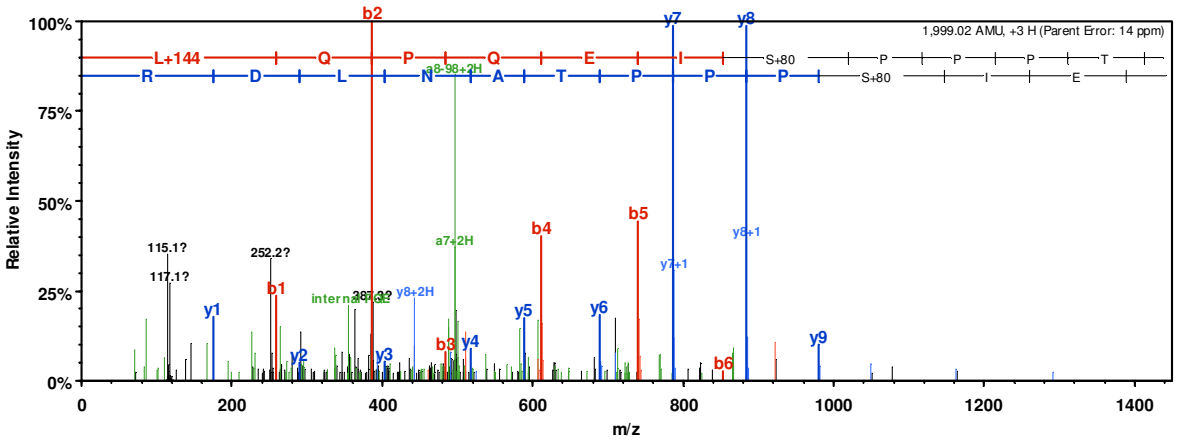
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	2,560.1	1,280.6	2,543.1	2,542.1	21
2	343.2				V	2,317.0	1,159.0	2,300.0	2,299.0	20
3	458.3			440.3	D	2,217.9	1,109.5	2,200.9	2,199.9	19
4	605.3			587.3	F	2,102.9	1,051.9	2,085.9	2,084.9	18
5	662.4			644.4	G	1,955.8	978.4	1,938.8	1,937.8	17
6	749.4	375.2		731.4	S	1,898.8	949.9	1,881.8	1,880.8	16
7	820.4	410.7		802.4	A	1,811.8	906.4	1,794.7	1,793.7	15
8	921.5	461.2		903.5	T	1,740.7	870.9	1,723.7	1,722.7	14
9	1,084.5	542.8		1,066.5	Y	1,639.7	820.3	1,622.6	1,621.7	13
10	1,199.6	600.3		1,181.6	D	1,476.6	738.8	1,459.6	1,458.6	12
11	1,314.6	657.8		1,296.6	D	1,361.6	681.3	1,344.6	1,343.6	11
12	1,443.6	722.3		1,425.6	E	1,246.6	623.8	1,229.5	1,228.5	10
13	1,580.7	790.9		1,562.7	H	1,117.5	559.3	1,100.5	1,099.5	9
14	1,717.8	859.4		1,699.7	H	980.5	490.7	963.4	962.4	8
15	1,804.8	902.9		1,786.8	S	843.4	422.2	826.4	825.4	7
16	1,905.8	953.4		1,887.8	T	756.4	378.7	739.3	738.4	6
17	2,018.9	1,010.0		2,000.9	L	655.3		638.3	637.3	5
18	2,118.0	1,059.5		2,100.0	V	542.2		525.2	524.2	4
19	2,285.0	1,143.0		2,267.0	S+80	443.2		426.1	425.2	3
20	2,386.0	1,193.5		2,368.0	T	276.2		259.1	258.2	2
21	2,560.1	1,280.6	2,543.1	2,542.1	R	175.1		158.1		1

CSK22_HUMAN: VYAEVNpSLR



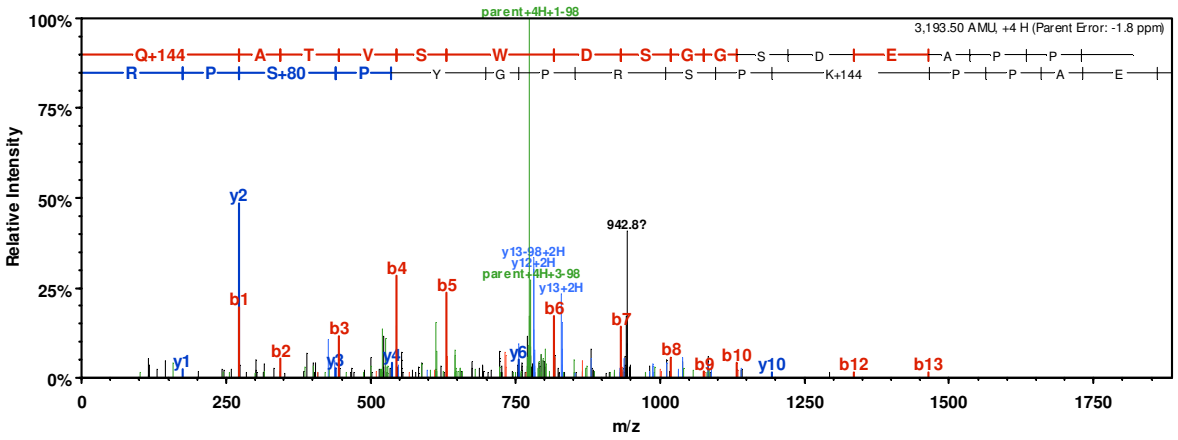
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,274.6	637.8	1,257.6	1,256.6	9
2	407.2				Y	1,031.5	516.2	1,014.4	1,013.4	8
3	478.3				A	868.4	434.7	851.4	850.4	7
4	607.3			589.3	E	797.4	399.2	780.3	779.3	6
5	706.4			688.4	V	668.3		651.3	650.3	5
6	820.4	410.7	803.4	802.4	N	569.2		552.2	551.2	4
7	987.4	494.2	970.4	969.4	S+80	455.2		438.2	437.2	3
8	1,100.5	550.8	1,083.5	1,082.5	L	288.2		271.2		2
9	1,274.6	637.8	1,257.6	1,256.6	R	175.1		158.1		1

FAK1_HUMAN: LQPQEIpSPPPTANLDR



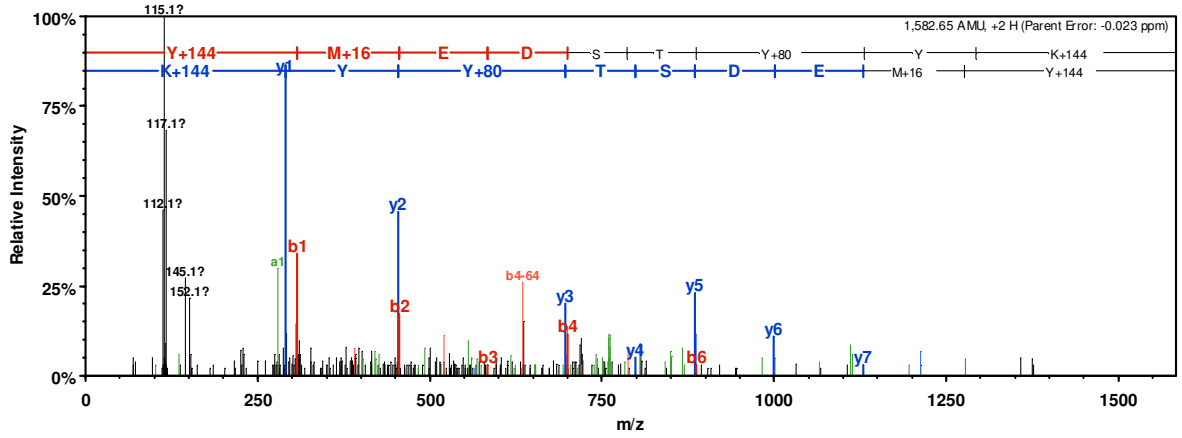
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				L+144	2,000.0	1,000.5	1,983.0	1,982.0	16
2	386.3		369.2		Q	1,742.8	871.9	1,725.8	1,724.8	15
3	483.3		466.3		P	1,614.8	807.9	1,597.7	1,596.7	14
4	611.4		594.3		Q	1,517.7	759.4	1,500.7	1,499.7	13
5	740.4		723.4	722.4	E	1,389.6	695.3	1,372.6	1,371.6	12
6	853.5	427.2	836.5	835.5	I	1,260.6	630.8	1,243.6	1,242.6	11
7	1,020.5	510.7	1,003.5	1,002.5	S+80	1,147.5	574.3	1,130.5	1,129.5	10
8	1,117.5	559.3	1,100.5	1,099.5	P	980.5	490.8	963.5	962.5	9
9	1,214.6	607.8	1,197.6	1,196.6	P	883.5	442.2	866.4	865.5	8
10	1,311.6	656.3	1,294.6	1,293.6	P	786.4	393.7	769.4	768.4	7
11	1,412.7	706.9	1,395.7	1,394.7	T	689.4	345.2	672.3	671.3	6
12	1,483.7	742.4	1,466.7	1,465.7	A	588.3		571.3	570.3	5
13	1,597.8	799.4	1,580.7	1,579.8	N	517.3		500.2	499.3	4
14	1,710.9	855.9	1,693.8	1,692.8	L	403.2		386.2	385.2	3
15	1,825.9	913.4	1,808.9	1,807.9	D	290.1		273.1	272.1	2
16	2,000.0	1,000.5	1,983.0	1,982.0	R	175.1		158.1		1

FAK1_HUMAN: QATVSWDSGGSDEAPPKPSRPGYPpSPR



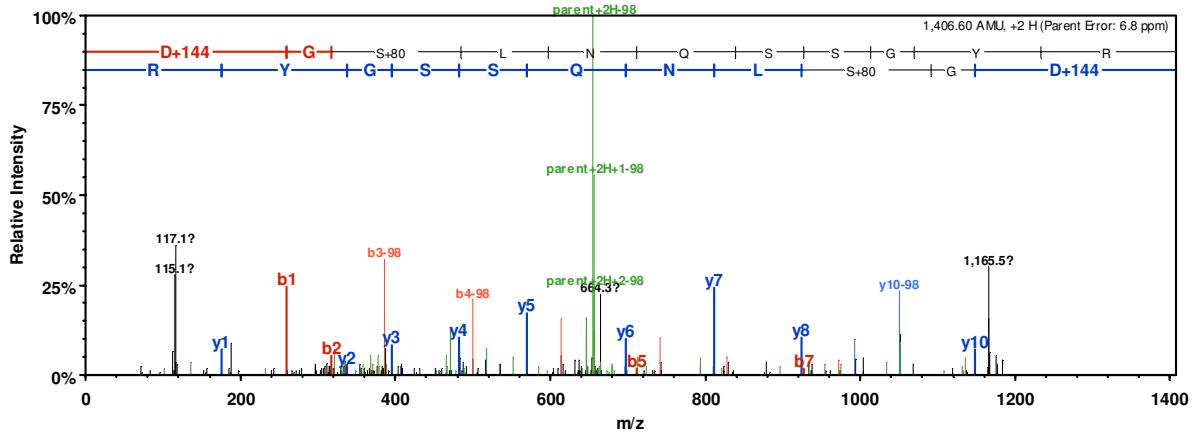
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	273.2		256.1		Q+144	3,194.5	1,597.8	3,177.5	3,176.5	27
2	344.2		327.2		A	2,922.4	1,461.7	2,905.3	2,904.3	26
3	445.3		428.2	427.2	T	2,851.3	1,426.2	2,834.3	2,833.3	25
4	544.3		527.3	526.3	V	2,750.3	1,375.6	2,733.2	2,732.3	24
5	631.4		614.3	613.3	S	2,651.2	1,326.1	2,634.2	2,633.2	23
6	817.4	409.2	800.4	799.4	W	2,564.2	1,282.6	2,547.1	2,546.2	22
7	932.5	466.7	915.4	914.4	D	2,378.1	1,189.5	2,361.1	2,360.1	21
8	1,019.5	510.2	1,002.5	1,001.5	S	2,263.1	1,132.0	2,246.0	2,245.1	20
9	1,076.5	538.8	1,059.5	1,058.5	G	2,176.0	1,088.5	2,159.0	2,158.0	19
10	1,133.5	567.3	1,116.5	1,115.5	G	2,119.0	1,060.0	2,102.0	2,101.0	18
11	1,220.6	610.8	1,203.5	1,202.6	S	2,062.0	1,031.5	2,045.0	2,044.0	17
12	1,335.6	668.3	1,318.6	1,317.6	D	1,975.0	988.0	1,957.9	1,956.9	16
13	1,464.6	732.8	1,447.6	1,446.6	E	1,859.9	930.5	1,842.9	1,841.9	15
14	1,535.7	768.3	1,518.6	1,517.7	A	1,730.9	865.9	1,713.9	1,712.9	14
15	1,632.7	816.9	1,615.7	1,614.7	P	1,659.8	830.4	1,642.8	1,641.8	13
16	1,729.8	865.4	1,712.8	1,711.8	P	1,562.8	781.9	1,545.8	1,544.8	12
17	2,002.0	1,001.5	1,984.9	1,984.0	K+144	1,465.7	733.4	1,448.7	1,447.7	11
18	2,099.0	1,050.0	2,082.0	2,081.0	P	1,193.5	597.3	1,176.5	1,175.5	10
19	2,186.1	1,093.5	2,169.0	2,168.1	S	1,096.5	548.8	1,079.5	1,078.5	9
20	2,342.2	1,171.6	2,325.1	2,324.2	R	1,009.5	505.2	992.4	991.5	8
21	2,439.2	1,220.1	2,422.2	2,421.2	P	853.4	427.2	836.3	835.4	7
22	2,496.2	1,248.6	2,479.2	2,478.2	G	756.3	378.7	739.3	738.3	6
23	2,659.3	1,330.2	2,642.3	2,641.3	Y	699.3		682.3	681.3	5
24	2,756.4	1,378.7	2,739.3	2,738.3	P	536.2		519.2	518.2	4
25	2,923.4	1,462.2	2,906.3	2,905.3	S+80	439.2		422.1	421.2	3
26	3,020.4	1,510.7	3,003.4	3,002.4	P	272.2		255.1		2
27	3,194.5	1,597.8	3,177.5	3,176.5	R	175.1		158.1		1

FAK1_HUMAN: YMEDSTpYYK



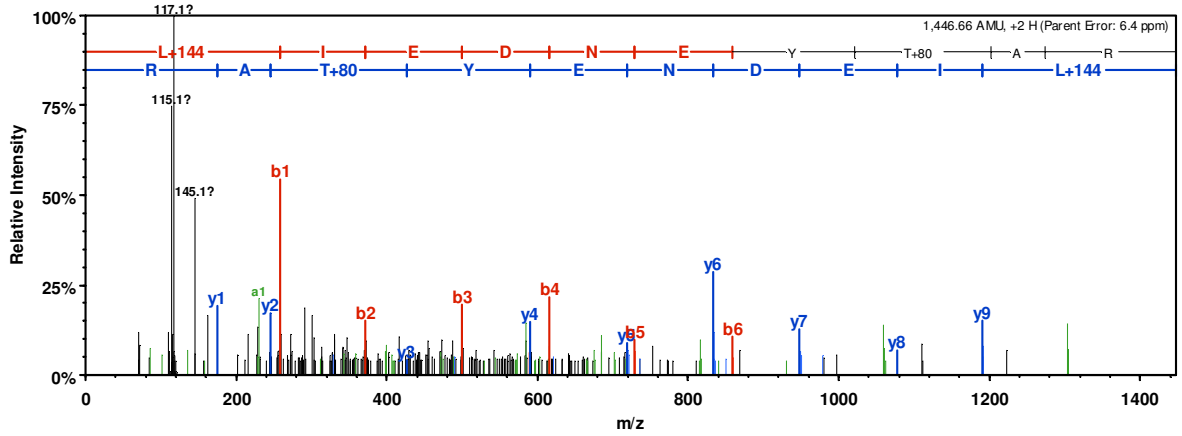
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	308.2				Y+144	1,583.7	792.3	1,566.6	1,565.6	9
2	455.2				M+16	1,276.5	638.8	1,259.5	1,258.5	8
3	584.3			566.2	E	1,129.5	565.2	1,112.4	1,111.4	7
4	699.3			681.3	D	1,000.4	500.7	983.4	982.4	6
5	786.3			768.3	S	885.4		868.4	867.4	5
6	887.4	444.2		869.3	T	798.4		781.3	780.3	4
7	1,130.4	565.7		1,112.4	Y+80	697.3		680.3		3
8	1,293.5	647.2		1,275.4	Y	454.3		437.3		2
9	1,583.7	792.3	1,566.6	1,565.6	K+144	291.2		274.2		1

FYN_HUMAN: DGpSLNQSSGYR



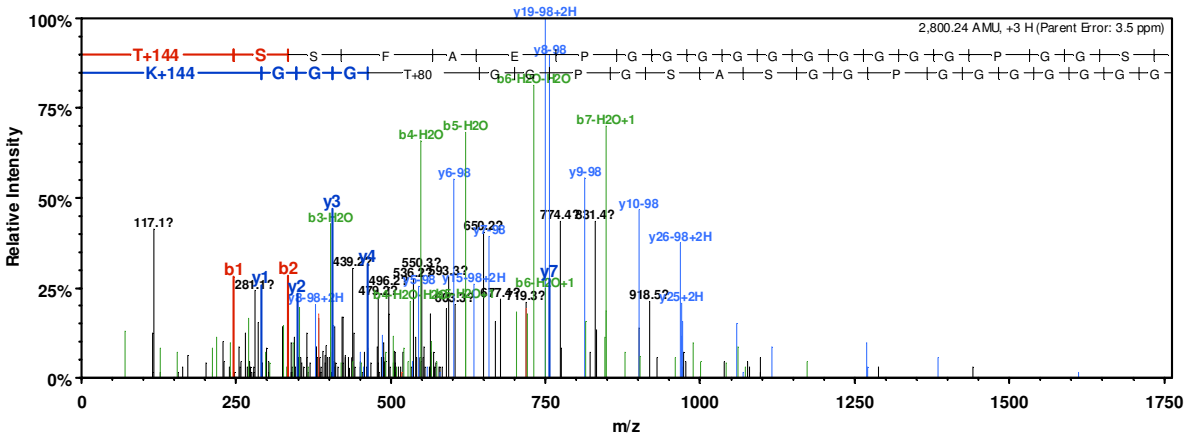
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	260.1			242.1	D+144	1,407.6	704.3	1,390.6	1,389.6	11
2	317.2			299.1	G	1,148.5	574.7	1,131.4	1,130.5	10
3	484.2			466.1	S+80	1,091.5	546.2	1,074.4	1,073.4	9
4	597.2			579.2	L	924.5	462.7	907.4	906.4	8
5	711.3		694.3	693.3	N	811.4	406.2	794.3	793.4	7
6	839.3	420.2	822.3	821.3	Q	697.3	349.2	680.3	679.3	6
7	926.4	463.7	909.3	908.4	S	569.3		552.2	551.3	5
8	1,013.4	507.2	996.4	995.4	S	482.2		465.2	464.2	4
9	1,070.4	535.7	1,053.4	1,052.4	G	395.2		378.2		3
10	1,233.5	617.2	1,216.5	1,215.5	Y	338.2		321.2		2
11	1,407.6	704.3	1,390.6	1,389.6	R	175.1		158.1		1

FYN_HUMAN: LIEDNEYpTAR



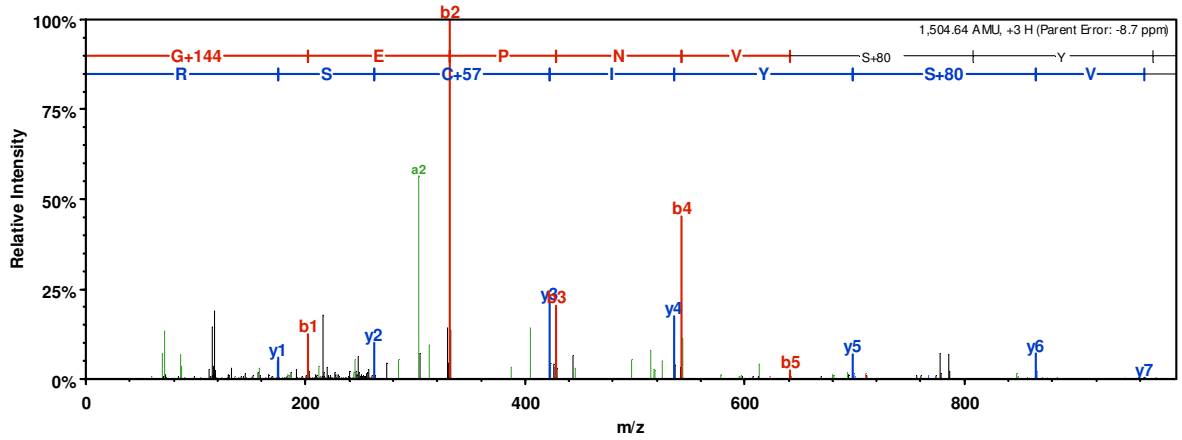
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				L+144	1,447.7	724.3	1,430.6	1,429.6	10
2	371.3				I	1,190.5	595.7	1,173.4	1,172.5	9
3	500.3			482.3	E	1,077.4	539.2	1,060.4	1,059.4	8
4	615.3			597.3	D	948.3	474.7	931.3	930.3	7
5	729.4		712.4	711.4	N	833.3	417.2	816.3	815.3	6
6	858.4	429.7	841.4	840.4	E	719.3		702.2	701.3	5
7	1,021.5	511.3	1,004.5	1,003.5	Y	590.2		573.2	572.2	4
8	1,202.5	601.8	1,185.5	1,184.5	T+80	427.2		410.1	409.2	3
9	1,273.5	637.3	1,256.5	1,255.5	A	246.2		229.1		2
10	1,447.7	724.3	1,430.6	1,429.6	R	175.1		158.1		1

GSK3A_HUMAN: TSSFAEPGGGGGGGGGGPGGSASGPGGpTGGGK



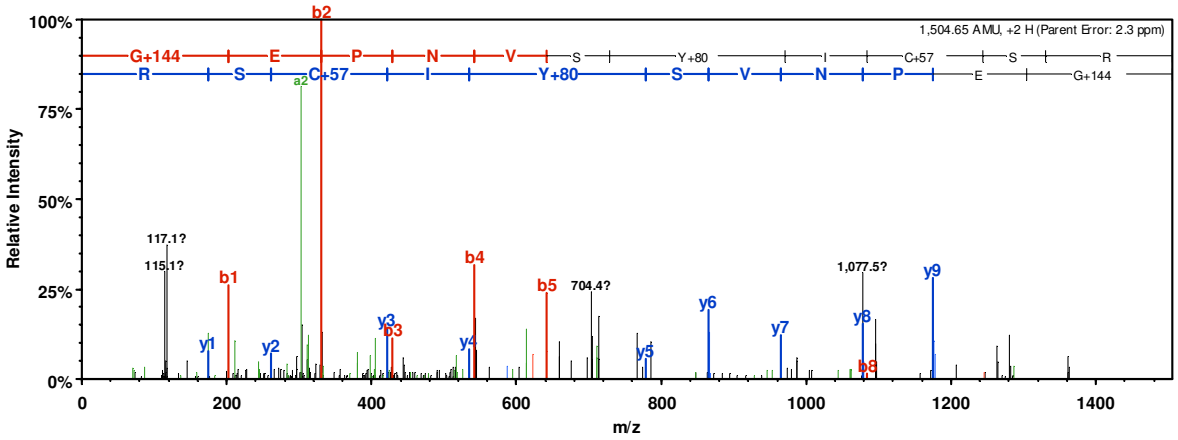
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	246.2			228.1	T+144	2,801.2	1,401.1	2,784.2	2,783.2	32
2	333.2			315.2	S	2,556.1	1,278.5	2,539.1	2,538.1	31
3	420.2			402.2	S	2,469.1	1,235.0	2,452.0	2,451.0	30
4	567.3			549.3	F	2,382.0	1,191.5	2,365.0	2,364.0	29
5	638.3			620.3	A	2,235.0	1,118.0	2,217.9	2,216.9	28
6	767.4	384.2		749.4	E	2,163.9	1,082.5	2,146.9	2,145.9	27
7	864.4	432.7		846.4	P	2,034.9	1,017.9	2,017.8	2,016.9	26
8	921.4	461.2		903.4	G	1,937.8	969.4	1,920.8	1,919.8	25
9	978.5	489.7		960.5	G	1,880.8	940.9	1,863.8	1,862.8	24
10	1,035.5	518.2		1,017.5	G	1,823.8	912.4	1,806.8	1,805.8	23
11	1,092.5	546.8		1,074.5	G	1,766.8	883.9	1,749.7	1,748.7	22
12	1,149.5	575.3		1,131.5	G	1,709.7	855.4	1,692.7	1,691.7	21
13	1,206.6	603.8		1,188.5	G	1,652.7	826.9	1,635.7	1,634.7	20
14	1,263.6	632.3		1,245.6	G	1,595.7	798.4	1,578.7	1,577.7	19
15	1,320.6	660.8		1,302.6	G	1,538.7	769.8	1,521.6	1,520.7	18
16	1,377.6	689.3		1,359.6	G	1,481.7	741.3	1,464.6	1,463.6	17
17	1,434.6	717.8		1,416.6	G	1,424.6	712.8	1,407.6	1,406.6	16
18	1,531.7	766.3		1,513.7	P	1,367.6	684.3	1,350.6	1,349.6	15
19	1,588.7	794.9		1,570.7	G	1,270.6	635.8	1,253.5	1,252.5	14
20	1,645.7	823.4		1,627.7	G	1,213.5	607.3	1,196.5	1,195.5	13
21	1,732.8	866.9		1,714.8	S	1,156.5	578.8	1,139.5	1,138.5	12
22	1,803.8	902.4		1,785.8	A	1,069.5	535.2	1,052.5	1,051.5	11
23	1,890.8	945.9		1,872.8	S	998.4	499.7	981.4	980.4	10
24	1,947.9	974.4		1,929.8	G	911.4	456.2	894.4	893.4	9
25	2,044.9	1,023.0		2,026.9	P	854.4	427.7	837.4	836.4	8
26	2,101.9	1,051.5		2,083.9	G	757.3	379.2	740.3	739.3	7
27	2,159.0	1,080.0		2,140.9	G	700.3	350.7	683.3	682.3	6
28	2,340.0	1,170.5		2,322.0	T+80	643.3		626.3	625.3	5
29	2,397.0	1,199.0		2,379.0	G	462.3		445.3		4
30	2,454.0	1,227.5		2,436.0	G	405.3		388.2		3
31	2,511.0	1,256.0		2,493.0	G	348.2		331.2		2
32	2,801.2	1,401.1	2,784.2	2,783.2	K+144	291.2		274.2		1

GSK3B_HUMAN: GEPNVpSYICSR



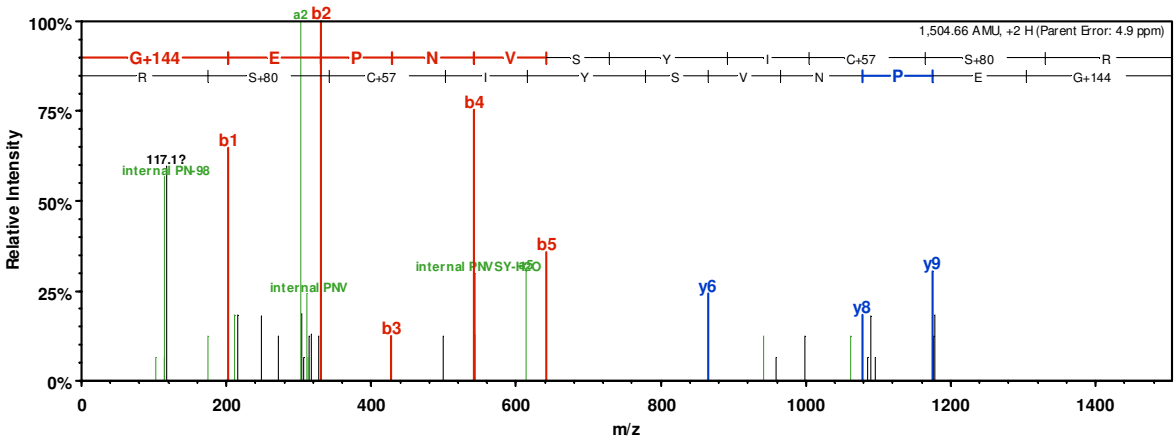
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,505.7	753.3	1,488.6	1,487.6	11
2	331.2			313.2	E	1,304.5	652.8	1,287.5	1,286.5	10
3	428.2			410.2	P	1,175.5	588.2	1,158.5	1,157.5	9
4	542.3		525.2	524.3	N	1,078.4	539.7	1,061.4	1,060.4	8
5	641.3		624.3	623.3	V	964.4	482.7	947.4	946.4	7
6	808.3	404.7	791.3	790.3	S+80	865.3	433.2	848.3	847.3	6
7	971.4	486.2	954.4	953.4	Y	698.3		681.3	680.3	5
8	1,084.5	542.7	1,067.5	1,066.5	I	535.3		518.2	517.3	4
9	1,244.5	622.8	1,227.5	1,226.5	C+57	422.2		405.2	404.2	3
10	1,331.5	666.3	1,314.5	1,313.5	S	262.2		245.1	244.1	2
11	1,505.7	753.3	1,488.6	1,487.6	R	175.1		158.1		1

GSK3B_HUMAN: GEPNVSpYICSR



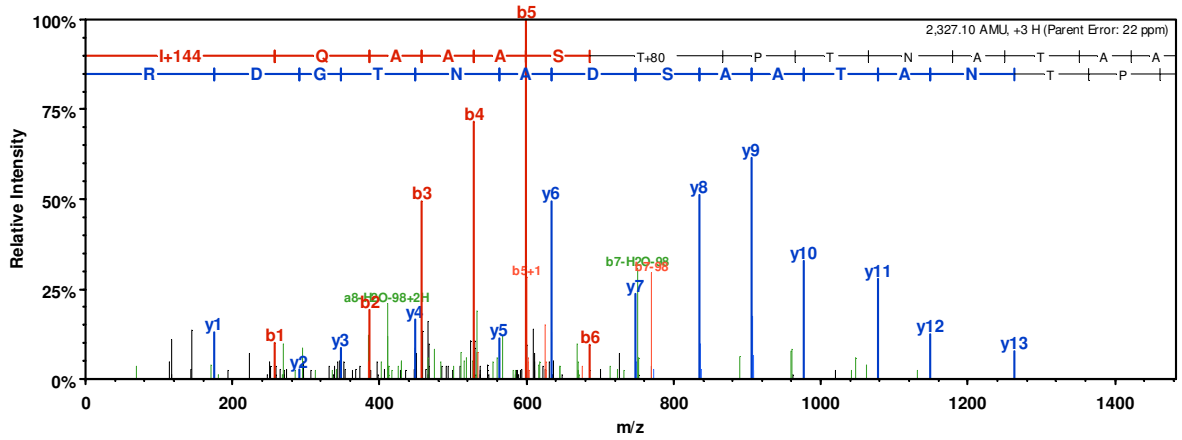
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,505.7	753.3	1,488.6	1,487.6	11
2	331.2			313.2	E	1,304.5	652.8	1,287.5	1,286.5	10
3	428.2			410.2	P	1,175.5	588.2	1,158.5	1,157.5	9
4	542.3		525.2	524.3	N	1,078.4	539.7	1,061.4	1,060.4	8
5	641.3		624.3	623.3	V	964.4	482.7	947.4	946.4	7
6	728.4	364.7	711.3	710.4	S	865.3	433.2	848.3	847.3	6
7	971.4	486.2	954.4	953.4	Y+80	778.3		761.3	760.3	5
8	1,084.5	542.7	1,067.5	1,066.5	I	535.3		518.2	517.3	4
9	1,244.5	622.8	1,227.5	1,226.5	C+57	422.2		405.2	404.2	3
10	1,331.5	666.3	1,314.5	1,313.5	S	262.2		245.1	244.1	2
11	1,505.7	753.3	1,488.6	1,487.6	R	175.1		158.1		1

GSK3B_HUMAN: GEPNVSYIC**pS**R



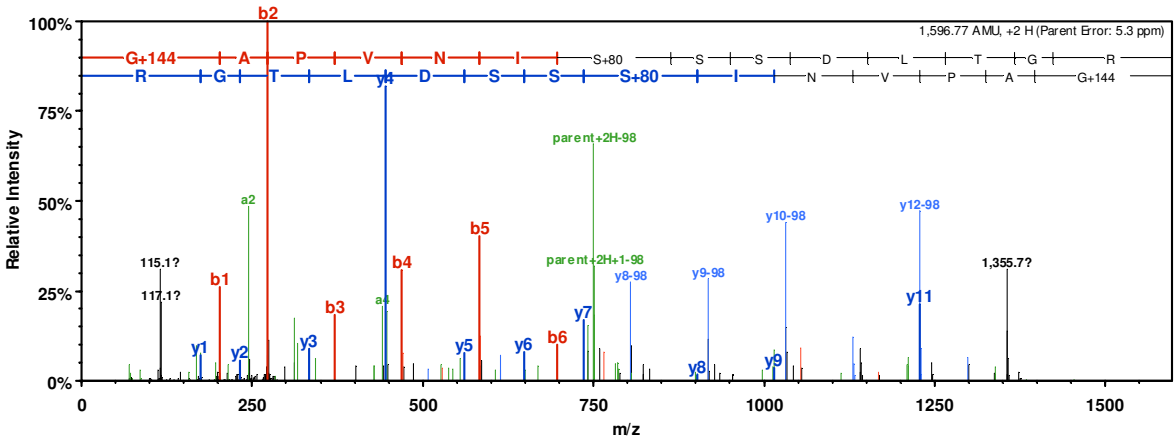
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,505.7	753.3	1,488.6	1,487.6	11
2	331.2			313.2	E	1,304.5	652.8	1,287.5	1,286.5	10
3	428.2			410.2	P	1,175.5	588.2	1,158.5	1,157.5	9
4	542.3		525.2	524.3	N	1,078.4	539.7	1,061.4	1,060.4	8
5	641.3		624.3	623.3	V	964.4	482.7	947.4	946.4	7
6	728.4	364.7	711.3	710.4	S	865.3	433.2	848.3	847.3	6
7	891.4	446.2	874.4	873.4	Y	778.3		761.3	760.3	5
8	1,004.5	502.8	987.5	986.5	I	615.2		598.2	597.2	4
9	1,164.5	582.8	1,147.5	1,146.5	C+57	502.1		485.1	484.1	3
10	1,331.5	666.3	1,314.5	1,313.5	S+80	342.1		325.1	324.1	2
11	1,505.7	753.3	1,488.6	1,487.6	R	175.1		158.1		1

GSK3B_HUMAN: IQAAASpTPTNATAASDANTGDR



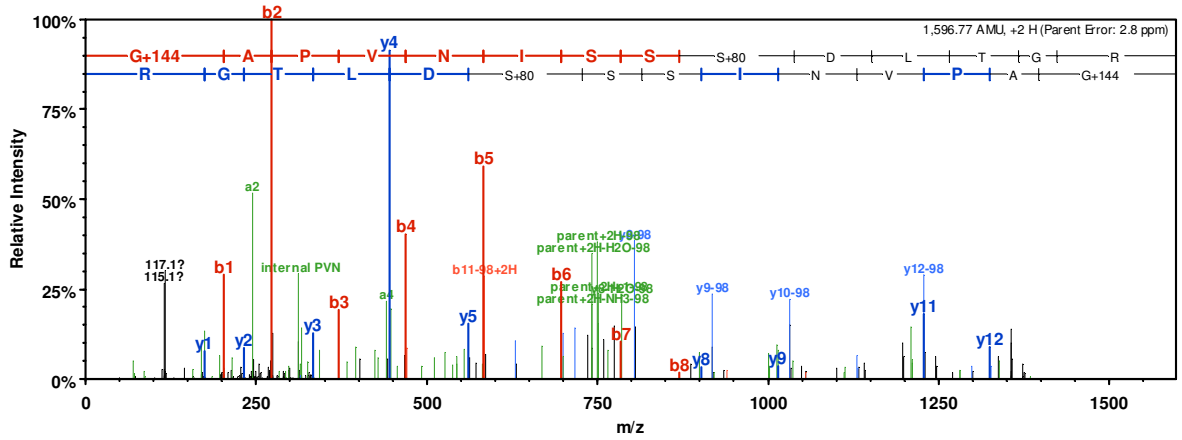
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				I+144	2,328.1	1,164.5	2,311.0	2,310.0	22
2	386.3		369.2		Q	2,070.9	1,035.9	2,053.8	2,052.9	21
3	457.3		440.3		A	1,942.8	971.9	1,925.8	1,924.8	20
4	528.3		511.3		A	1,871.8	936.4	1,854.8	1,853.8	19
5	599.4		582.3		A	1,800.7	900.9	1,783.7	1,782.7	18
6	686.4	343.7	669.4	668.4	S	1,729.7	865.4	1,712.7	1,711.7	17
7	867.4	434.2	850.4	849.4	T+80	1,642.7	821.8	1,625.6	1,624.7	16
8	964.5	482.7	947.4	946.5	P	1,461.7	731.3	1,444.6	1,443.6	15
9	1,065.5	533.3	1,048.5	1,047.5	T	1,364.6	682.8	1,347.6	1,346.6	14
10	1,179.6	590.3	1,162.5	1,161.5	N	1,263.6	632.3	1,246.5	1,245.5	13
11	1,250.6	625.8	1,233.6	1,232.6	A	1,149.5	575.3	1,132.5	1,131.5	12
12	1,351.6	676.3	1,334.6	1,333.6	T	1,078.5	539.7	1,061.4	1,060.5	11
13	1,422.7	711.8	1,405.6	1,404.7	A	977.4	489.2	960.4	959.4	10
14	1,493.7	747.4	1,476.7	1,475.7	A	906.4	453.7	889.4	888.4	9
15	1,580.7	790.9	1,563.7	1,562.7	S	835.4	418.2	818.3	817.3	8
16	1,695.8	848.4	1,678.7	1,677.8	D	748.3	374.7	731.3	730.3	7
17	1,766.8	883.9	1,749.8	1,748.8	A	633.3	317.2	616.3	615.3	6
18	1,880.9	940.9	1,863.8	1,862.8	N	562.3		545.2	544.2	5
19	1,981.9	991.5	1,964.9	1,963.9	T	448.2		431.2	430.2	4
20	2,038.9	1,020.0	2,021.9	2,020.9	G	347.2		330.1	329.2	3
21	2,153.9	1,077.5	2,136.9	2,135.9	D	290.1		273.1	272.1	2
22	2,328.1	1,164.5	2,311.0	2,310.0	R	175.1		158.1		1

KC1D_HUMAN: GAPVNIpSSSDLTGR



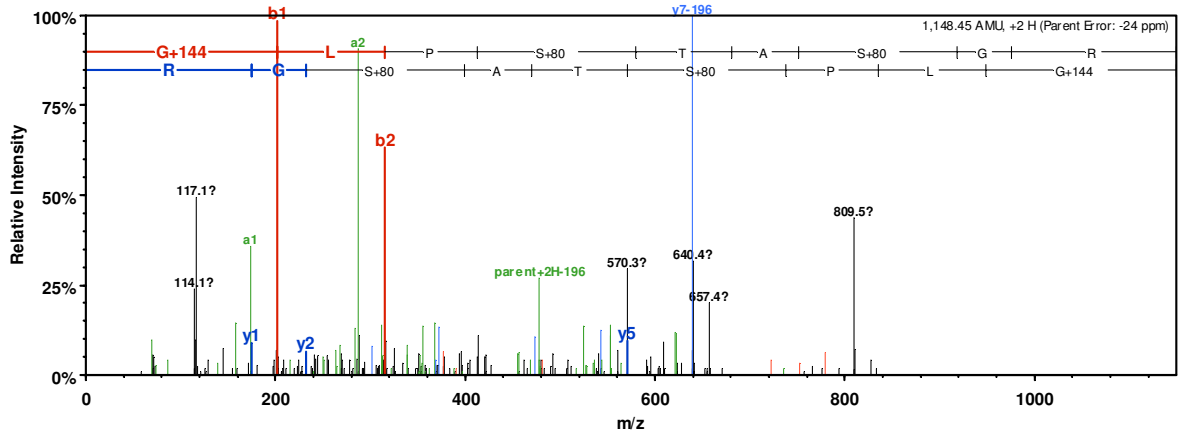
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,597.8	799.4	1,580.7	1,579.8	14
2	273.2				A	1,396.6	698.8	1,379.6	1,378.6	13
3	370.2				P	1,325.6	663.3	1,308.6	1,307.6	12
4	469.3				V	1,228.6	614.8	1,211.5	1,210.5	11
5	583.3		566.3		N	1,129.5	565.2	1,112.5	1,111.5	10
6	696.4	348.7	679.4		I	1,015.4	508.2	998.4	997.4	9
7	863.4	432.2	846.4	845.4	S+80	902.4	451.7	885.3	884.4	8
8	950.4	475.7	933.4	932.4	S	735.4	368.2	718.3	717.4	7
9	1,037.5	519.2	1,020.5	1,019.5	S	648.3	324.7	631.3	630.3	6
10	1,152.5	576.8	1,135.5	1,134.5	D	561.3		544.3	543.3	5
11	1,265.6	633.3	1,248.6	1,247.6	L	446.3		429.2	428.3	4
12	1,366.6	683.8	1,349.6	1,348.6	T	333.2		316.2	315.2	3
13	1,423.7	712.3	1,406.6	1,405.6	G	232.1		215.1		2
14	1,597.8	799.4	1,580.7	1,579.8	R	175.1		158.1		1

KC1D_HUMAN: GAPVNISSpSDLTGR



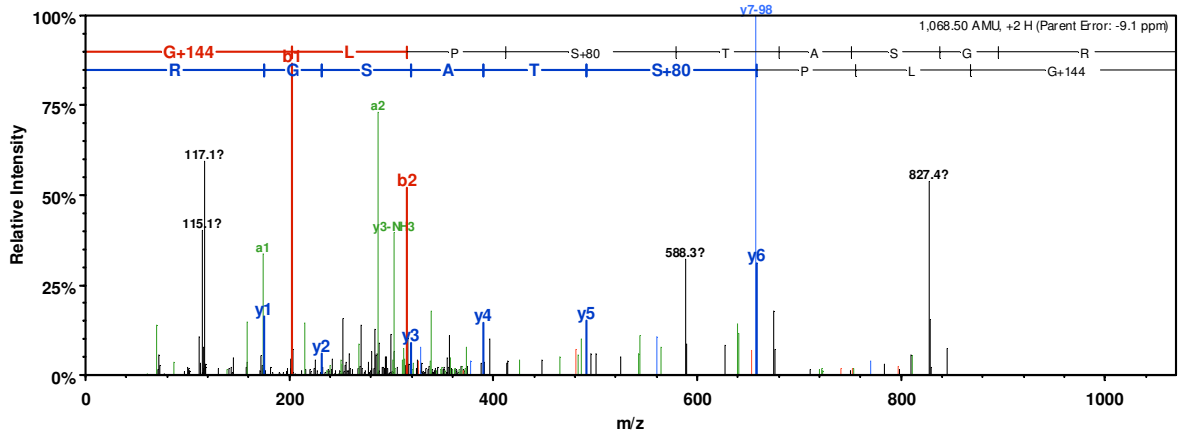
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,597.8	799.4	1,580.7	1,579.8	14
2	273.2				A	1,396.6	698.8	1,379.6	1,378.6	13
3	370.2				P	1,325.6	663.3	1,308.6	1,307.6	12
4	469.3				V	1,228.6	614.8	1,211.5	1,210.5	11
5	583.3		566.3		N	1,129.5	565.2	1,112.5	1,111.5	10
6	696.4	348.7	679.4		I	1,015.4	508.2	998.4	997.4	9
7	783.4	392.2	766.4	765.4	S	902.4	451.7	885.3	884.4	8
8	870.5	435.7	853.5	852.5	S	815.3	408.2	798.3	797.3	7
9	1,037.5	519.2	1,020.5	1,019.5	S+80	728.3	364.7	711.3	710.3	6
10	1,152.5	576.8	1,135.5	1,134.5	D	561.3		544.3	543.3	5
11	1,265.6	633.3	1,248.6	1,247.6	L	446.3		429.2	428.3	4
12	1,366.6	683.8	1,349.6	1,348.6	T	333.2		316.2	315.2	3
13	1,423.7	712.3	1,406.6	1,405.6	G	232.1		215.1		2
14	1,597.8	799.4	1,580.7	1,579.8	R	175.1		158.1		1

KC1D_HUMAN: GLPpSTApSGR



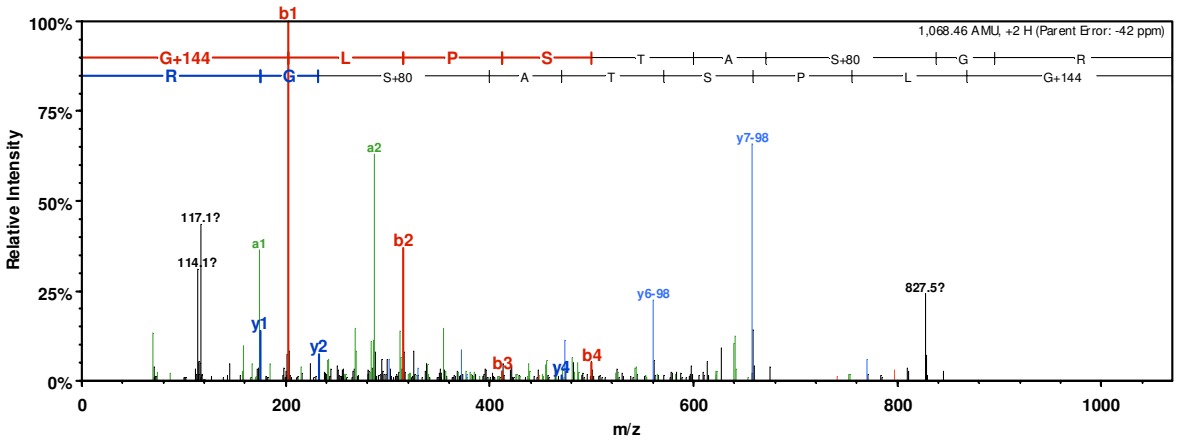
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,149.5	575.2	1,132.5	1,131.5	9
2	315.2				L	948.4	474.7	931.3	930.3	8
3	412.3				P	835.3	418.1	818.2	817.3	7
4	579.3			561.3	S+80	738.2	369.6	721.2	720.2	6
5	680.3			662.3	T	571.2		554.2	553.2	5
6	751.4	376.2		733.3	A	470.2		453.1	452.2	4
7	918.3	459.7		900.3	S+80	399.1		382.1	381.1	3
8	975.4	488.2		957.4	G	232.1		215.1		2
9	1,149.5	575.2	1,132.5	1,131.5	R	175.1		158.1		1

KC1D_HUMAN: GLPpSTASGR



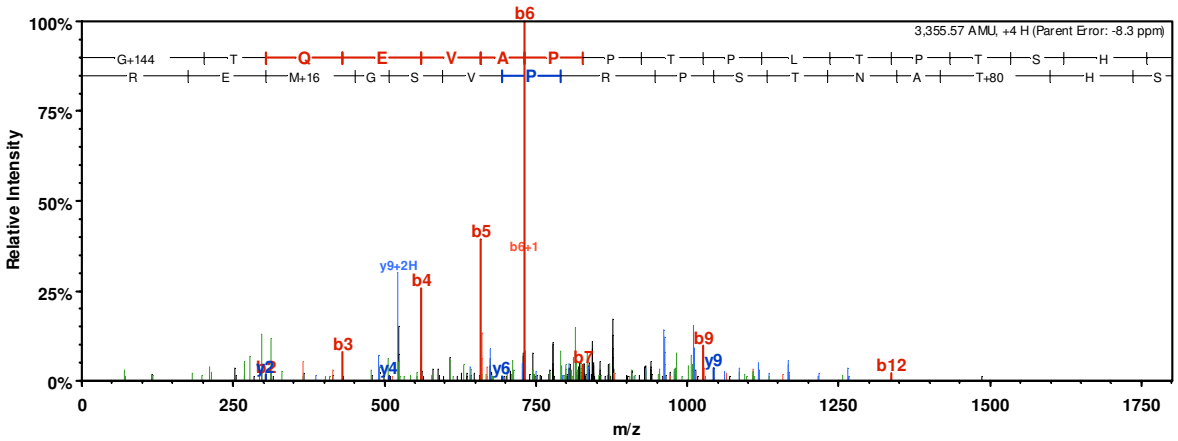
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,069.5	535.3	1,052.5	1,051.5	9
2	315.2				L	868.4	434.7	851.4	850.4	8
3	412.3				P	755.3	378.2	738.3	737.3	7
4	579.3			561.3	S+80	658.3	329.6	641.2	640.2	6
5	680.3			662.3	T	491.3		474.2	473.2	5
6	751.4	376.2		733.3	A	390.2		373.2	372.2	4
7	838.4	419.7		820.4	S	319.2		302.1	301.2	3
8	895.4	448.2		877.4	G	232.1		215.1		2
9	1,069.5	535.3	1,052.5	1,051.5	R	175.1		158.1		1

KC1D_HUMAN: GLPSTApSGR



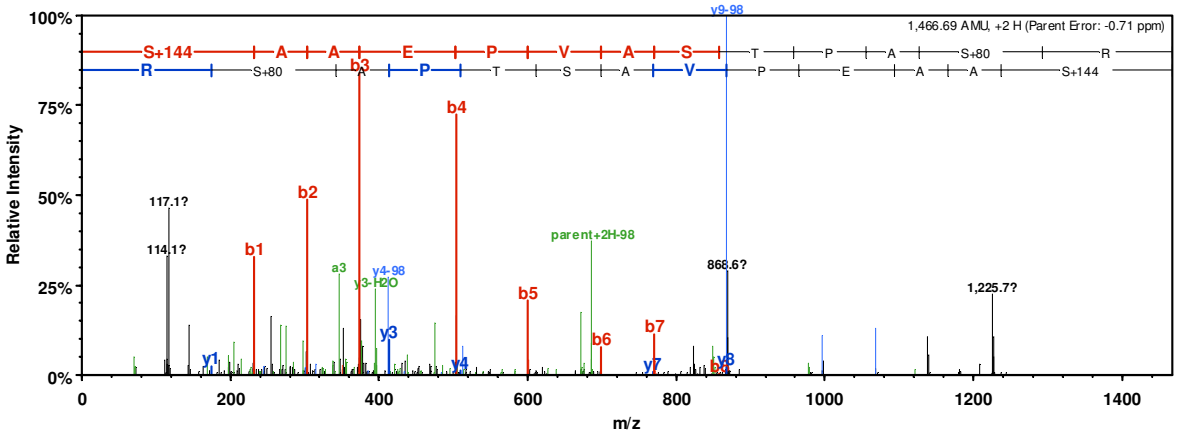
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,069.5	535.3	1,052.5	1,051.5	9
2	315.2				L	868.4	434.7	851.4	850.4	8
3	412.3				P	755.3	378.2	738.3	737.3	7
4	499.3			481.3	S	658.3	329.6	641.2	640.2	6
5	600.3			582.3	T	571.2		554.2	553.2	5
6	671.4	336.2		653.4	A	470.2		453.1	452.2	4
7	838.4	419.7		820.4	S+80	399.1		382.1	381.1	3
8	895.4	448.2		877.4	G	232.1		215.1		2
9	1,069.5	535.3	1,052.5	1,051.5	R	175.1		158.1		1

KC1D_HUMAN: GTQEVAPPTPLTPTSHpTANTSPRPVSGMER



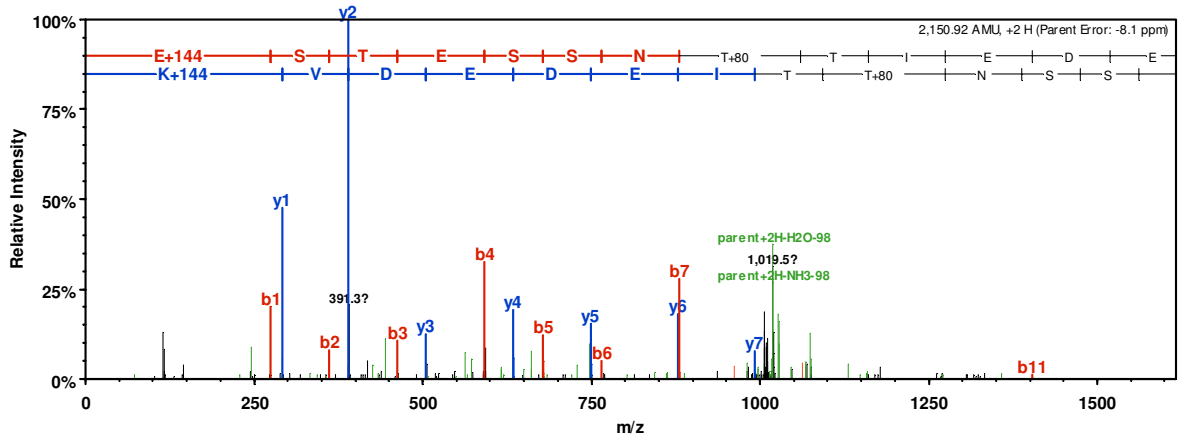
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	3,356.6	1,678.8	3,339.6	3,338.6	30
2	303.2			285.2	T	3,155.5	1,578.2	3,138.5	3,137.5	29
3	431.2		414.2	413.2	Q	3,054.4	1,527.7	3,037.4	3,036.4	28
4	560.3		543.3	542.3	E	2,926.4	1,463.7	2,909.4	2,908.4	27
5	659.3		642.3	641.3	V	2,797.3	1,399.2	2,780.3	2,779.3	26
6	730.4	365.7	713.4	712.4	A	2,698.3	1,349.6	2,681.2	2,680.3	25
7	827.4	414.2	810.4	809.4	P	2,627.2	1,314.1	2,610.2	2,609.2	24
8	924.5	462.7	907.5	906.5	P	2,530.2	1,265.6	2,513.1	2,512.2	23
9	1,025.5	513.3	1,008.5	1,007.5	T	2,433.1	1,217.1	2,416.1	2,415.1	22
10	1,122.6	561.8	1,105.6	1,104.6	P	2,332.1	1,166.5	2,315.0	2,314.1	21
11	1,235.7	618.3	1,218.6	1,217.7	L	2,235.0	1,118.0	2,218.0	2,217.0	20
12	1,336.7	668.9	1,319.7	1,318.7	T	2,121.9	1,061.5	2,104.9	2,103.9	19
13	1,433.8	717.4	1,416.8	1,415.8	P	2,020.9	1,010.9	2,003.9	2,002.9	18
14	1,534.8	767.9	1,517.8	1,516.8	T	1,923.8	962.4	1,906.8	1,905.8	17
15	1,621.9	811.4	1,604.8	1,603.8	S	1,822.8	911.9	1,805.8	1,804.8	16
16	1,758.9	880.0	1,741.9	1,740.9	H	1,735.8	868.4	1,718.7	1,717.7	15
17	1,939.9	970.5	1,922.9	1,921.9	T+80	1,598.7	799.9	1,581.7	1,580.7	14
18	2,011.0	1,006.0	1,993.9	1,993.0	A	1,417.7	709.3	1,400.7	1,399.7	13
19	2,125.0	1,063.0	2,108.0	2,107.0	N	1,346.6	673.8	1,329.6	1,328.6	12
20	2,226.1	1,113.5	2,209.0	2,208.0	T	1,232.6	616.8	1,215.6	1,214.6	11
21	2,313.1	1,157.0	2,296.1	2,295.1	S	1,131.6	566.3	1,114.5	1,113.5	10
22	2,410.1	1,205.6	2,393.1	2,392.1	P	1,044.5	522.8	1,027.5	1,026.5	9
23	2,566.2	1,283.6	2,549.2	2,548.2	R	947.5	474.2	930.4	929.5	8
24	2,663.3	1,332.2	2,646.3	2,645.3	P	791.4	396.2	774.3	773.4	7
25	2,762.4	1,381.7	2,745.3	2,744.4	V	694.3	347.7	677.3	676.3	6
26	2,849.4	1,425.2	2,832.4	2,831.4	S	595.3		578.2	577.2	5
27	2,906.4	1,453.7	2,889.4	2,888.4	G	508.2		491.2	490.2	4
28	3,053.5	1,527.2	3,036.4	3,035.4	M+16	451.2		434.2	433.2	3
29	3,182.5	1,591.8	3,165.5	3,164.5	E	304.2		287.1	286.2	2
30	3,356.6	1,678.8	3,339.6	3,338.6	R	175.1		158.1		1

KC1E_HUMAN: SAAEPVASTPApSR



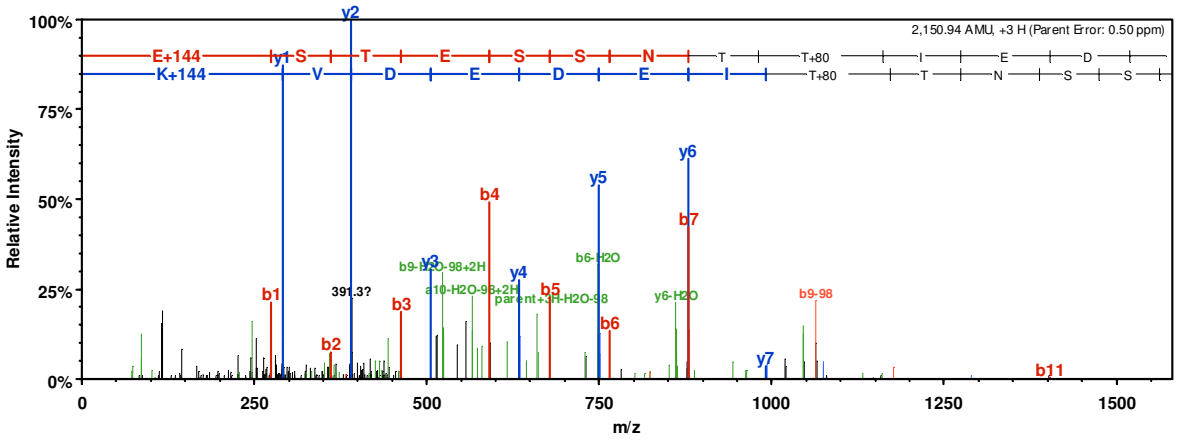
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,467.7	734.4	1,450.7	1,449.7	13
2	303.2			285.2	A	1,236.6	618.8	1,219.5	1,218.6	12
3	374.2			356.2	A	1,165.5	583.3	1,148.5	1,147.5	11
4	503.3			485.2	E	1,094.5	547.7	1,077.5	1,076.5	10
5	600.3			582.3	P	965.4	483.2	948.4	947.4	9
6	699.4	350.2		681.4	V	868.4	434.7	851.4	850.4	8
7	770.4	385.7		752.4	A	769.3	385.2	752.3	751.3	7
8	857.4	429.2		839.4	S	698.3	349.6	681.3	680.3	6
9	958.5	479.8		940.5	T	611.3		594.2	593.2	5
10	1,055.5	528.3		1,037.5	P	510.2		493.2	492.2	4
11	1,126.6	563.8		1,108.6	A	413.2		396.1	395.1	3
12	1,293.6	647.3		1,275.6	S+80	342.1		325.1	324.1	2
13	1,467.7	734.4	1,450.7	1,449.7	R	175.1		158.1		1

KCC2D_HUMAN: ESTESSNpTTIEDEDVK



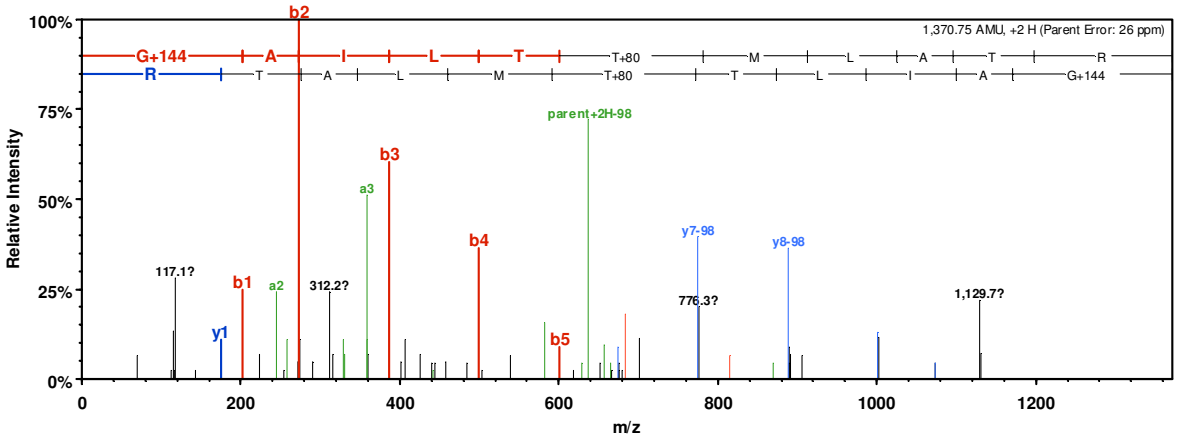
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	274.2			256.1	E+144	2,151.9	1,076.5	2,134.9	2,133.9	16
2	361.2			343.2	S	1,878.8	939.9	1,861.8	1,860.8	15
3	462.2			444.2	T	1,791.8	896.4	1,774.7	1,773.8	14
4	591.3			573.3	E	1,690.7	845.9	1,673.7	1,672.7	13
5	678.3			660.3	S	1,561.7	781.3	1,544.6	1,543.7	12
6	765.3	383.2		747.3	S	1,474.6	737.8	1,457.6	1,456.6	11
7	879.4	440.2	862.4	861.4	N	1,387.6	694.3	1,370.6	1,369.6	10
8	1,060.4	530.7	1,043.4	1,042.4	T+80	1,273.6	637.3	1,256.5	1,255.6	9
9	1,161.4	581.2	1,144.4	1,143.4	T	1,092.6	546.8	1,075.5	1,074.5	8
10	1,274.5	637.8	1,257.5	1,256.5	I	991.5	496.3	974.5	973.5	7
11	1,403.6	702.3	1,386.5	1,385.6	E	878.4	439.7	861.4	860.4	6
12	1,518.6	759.8	1,501.6	1,500.6	D	749.4		732.4	731.4	5
13	1,647.6	824.3	1,630.6	1,629.6	E	634.4		617.3	616.3	4
14	1,762.7	881.8	1,745.6	1,744.7	D	505.3		488.3	487.3	3
15	1,861.7	931.4	1,844.7	1,843.7	V	390.3		373.3		2
16	2,151.9	1,076.5	2,134.9	2,133.9	K+144	291.2		274.2		1

KCC2D_HUMAN: ESTESSNTpTIEDEDVK



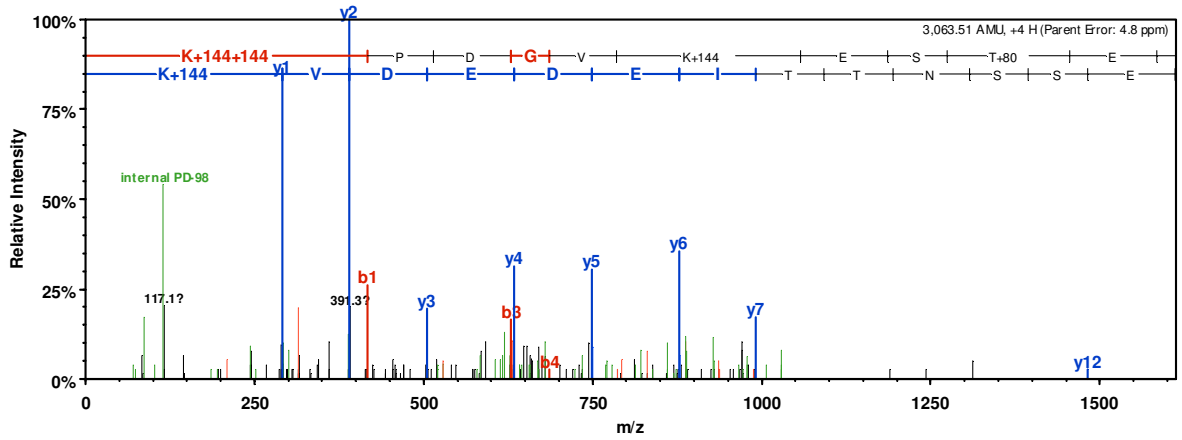
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	274.2			256.1	E+144	2,151.9	1,076.5	2,134.9	2,133.9	16
2	361.2			343.2	S	1,878.8	939.9	1,861.8	1,860.8	15
3	462.2			444.2	T	1,791.8	896.4	1,774.7	1,773.8	14
4	591.3			573.3	E	1,690.7	845.9	1,673.7	1,672.7	13
5	678.3			660.3	S	1,561.7	781.3	1,544.6	1,543.7	12
6	765.3	383.2		747.3	S	1,474.6	737.8	1,457.6	1,456.6	11
7	879.4	440.2	862.4	861.4	N	1,387.6	694.3	1,370.6	1,369.6	10
8	980.4	490.7	963.4	962.4	T	1,273.6	637.3	1,256.5	1,255.6	9
9	1,161.4	581.2	1,144.4	1,143.4	T+80	1,172.5	586.8	1,155.5	1,154.5	8
10	1,274.5	637.8	1,257.5	1,256.5	I	991.5	496.3	974.5	973.5	7
11	1,403.6	702.3	1,386.5	1,385.6	E	878.4	439.7	861.4	860.4	6
12	1,518.6	759.8	1,501.6	1,500.6	D	749.4		732.4	731.4	5
13	1,647.6	824.3	1,630.6	1,629.6	E	634.4		617.3	616.3	4
14	1,762.7	881.8	1,745.6	1,744.7	D	505.3		488.3	487.3	3
15	1,861.7	931.4	1,844.7	1,843.7	V	390.3		373.3		2
16	2,151.9	1,076.5	2,134.9	2,133.9	K+144	291.2		274.2		1

KCC2D_HUMAN: GAILTpTMLATR



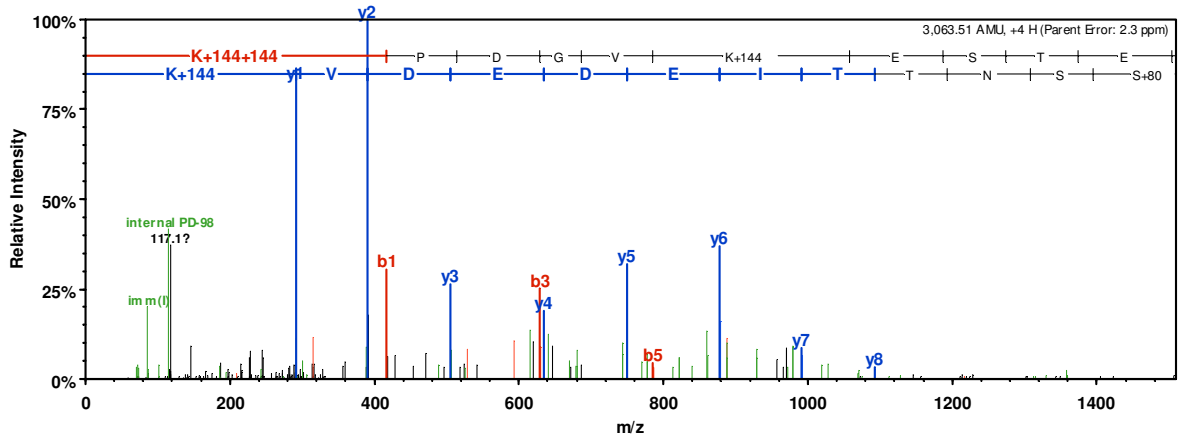
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,371.7	686.4	1,354.7	1,353.7	11
2	273.2				A	1,170.6	585.8	1,153.6	1,152.6	10
3	386.3				I	1,099.6	550.3	1,082.5	1,081.5	9
4	499.3				L	986.5	493.7	969.4	968.5	8
5	600.4			582.4	T	873.4	437.2	856.4	855.4	7
6	781.4	391.2		763.4	T+80	772.3	386.7	755.3	754.3	6
7	912.4	456.7		894.4	M	591.3		574.3	573.3	5
8	1,025.5	513.3		1,007.5	L	460.3		443.3	442.3	4
9	1,096.6	548.8		1,078.5	A	347.2		330.2	329.2	3
10	1,197.6	599.3		1,179.6	T	276.2		259.1	258.2	2
11	1,371.7	686.4	1,354.7	1,353.7	R	175.1		158.1		1

KCC2D_HUMAN: KPDGVKESpTESSNTTIEDEDVK



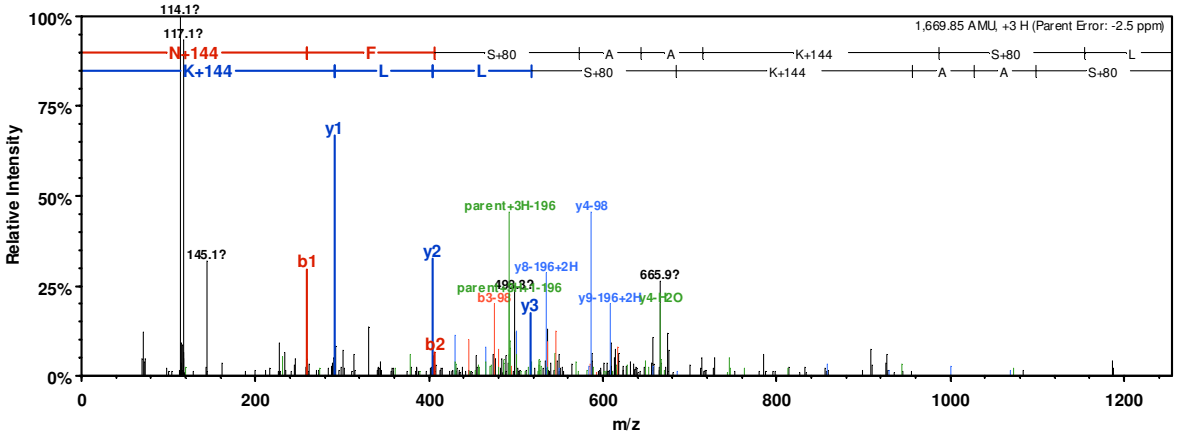
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	417.3	209.2	400.3		K+288	3,064.5	1,532.8	3,047.5	3,046.5	22
2	514.4	257.7	497.3		P	2,648.2	1,324.6	2,631.2	2,630.2	21
3	629.4	315.2	612.4	611.4	D	2,551.2	1,276.1	2,534.1	2,533.1	20
4	686.4	343.7	669.4	668.4	G	2,436.1	1,218.6	2,419.1	2,418.1	19
5	785.5	393.2	768.5	767.5	V	2,379.1	1,190.1	2,362.1	2,361.1	18
6	1,057.7	529.3	1,040.6	1,039.7	K+144	2,280.0	1,140.5	2,263.0	2,262.0	17
7	1,186.7	593.9	1,169.7	1,168.7	E	2,007.8	1,004.4	1,990.8	1,989.8	16
8	1,273.7	637.4	1,256.7	1,255.7	S	1,878.8	939.9	1,861.8	1,860.8	15
9	1,454.8	727.9	1,437.7	1,436.8	T+80	1,791.8	896.4	1,774.7	1,773.8	14
10	1,583.8	792.4	1,566.8	1,565.8	E	1,610.8	805.9	1,593.7	1,592.7	13
11	1,670.8	835.9	1,653.8	1,652.8	S	1,481.7	741.4	1,464.7	1,463.7	12
12	1,757.9	879.4	1,740.8	1,739.9	S	1,394.7	697.8	1,377.7	1,376.7	11
13	1,871.9	936.5	1,854.9	1,853.9	N	1,307.6	654.3	1,290.6	1,289.6	10
14	1,973.0	987.0	1,955.9	1,954.9	T	1,193.6	597.3	1,176.6	1,175.6	9
15	2,074.0	1,037.5	2,057.0	2,056.0	T	1,092.6	546.8	1,075.5	1,074.5	8
16	2,187.1	1,094.0	2,170.1	2,169.1	I	991.5	496.3	974.5	973.5	7
17	2,316.1	1,158.6	2,299.1	2,298.1	E	878.4	439.7	861.4	860.4	6
18	2,431.2	1,216.1	2,414.1	2,413.2	D	749.4		732.4	731.4	5
19	2,560.2	1,280.6	2,543.2	2,542.2	E	634.4		617.3	616.3	4
20	2,675.2	1,338.1	2,658.2	2,657.2	D	505.3		488.3	487.3	3
21	2,774.3	1,387.7	2,757.3	2,756.3	V	390.3		373.3		2
22	3,064.5	1,532.8	3,047.5	3,046.5	K+144	291.2		274.2		1

KCC2D_HUMAN: KPDGVKESTEpSSNTTIEDEDVK



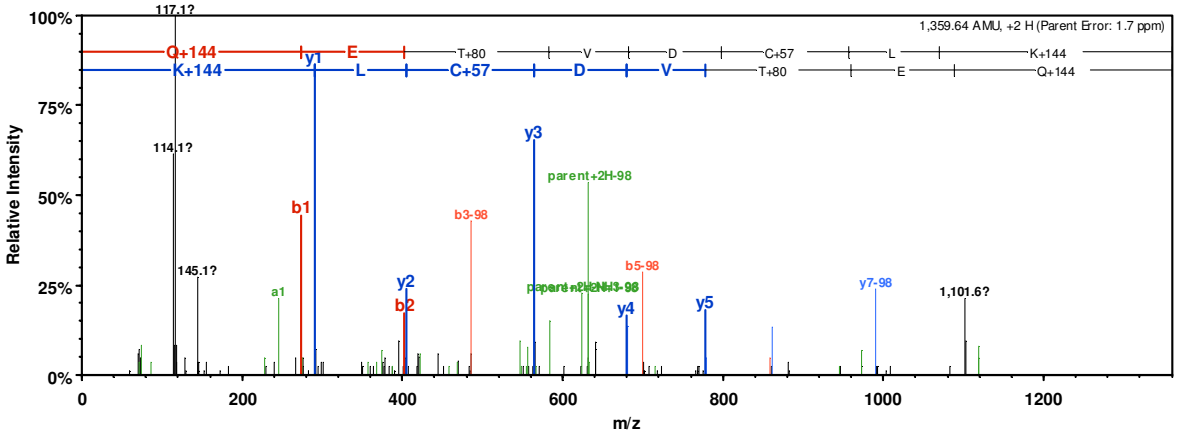
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	417.3	209.2	400.3		K+288	3,064.5	1,532.8	3,047.5	3,046.5	22
2	514.4	257.7	497.3		P	2,648.2	1,324.6	2,631.2	2,630.2	21
3	629.4	315.2	612.4	611.4	D	2,551.2	1,276.1	2,534.1	2,533.1	20
4	686.4	343.7	669.4	668.4	G	2,436.1	1,218.6	2,419.1	2,418.1	19
5	785.5	393.2	768.5	767.5	V	2,379.1	1,190.1	2,362.1	2,361.1	18
6	1,057.7	529.3	1,040.6	1,039.7	K+144	2,280.0	1,140.5	2,263.0	2,262.0	17
7	1,186.7	593.9	1,169.7	1,168.7	E	2,007.8	1,004.4	1,990.8	1,989.8	16
8	1,273.7	637.4	1,256.7	1,255.7	S	1,878.8	939.9	1,861.8	1,860.8	15
9	1,374.8	687.9	1,357.8	1,356.8	T	1,791.8	896.4	1,774.7	1,773.8	14
10	1,503.8	752.4	1,486.8	1,485.8	E	1,690.7	845.9	1,673.7	1,672.7	13
11	1,670.8	835.9	1,653.8	1,652.8	S+80	1,561.7	781.3	1,544.6	1,543.7	12
12	1,757.9	879.4	1,740.8	1,739.9	S	1,394.7	697.8	1,377.7	1,376.7	11
13	1,871.9	936.5	1,854.9	1,853.9	N	1,307.6	654.3	1,290.6	1,289.6	10
14	1,973.0	987.0	1,955.9	1,954.9	T	1,193.6	597.3	1,176.6	1,175.6	9
15	2,074.0	1,037.5	2,057.0	2,056.0	T	1,092.6	546.8	1,075.5	1,074.5	8
16	2,187.1	1,094.0	2,170.1	2,169.1	I	991.5	496.3	974.5	973.5	7
17	2,316.1	1,158.6	2,299.1	2,298.1	E	878.4	439.7	861.4	860.4	6
18	2,431.2	1,216.1	2,414.1	2,413.2	D	749.4		732.4	731.4	5
19	2,560.2	1,280.6	2,543.2	2,542.2	E	634.4		617.3	616.3	4
20	2,675.2	1,338.1	2,658.2	2,657.2	D	505.3		488.3	487.3	3
21	2,774.3	1,387.7	2,757.3	2,756.3	V	390.3		373.3		2
22	3,064.5	1,532.8	3,047.5	3,046.5	K+144	291.2		274.2		1

KCC2D_HUMAN: NFpSAAKpSLLK



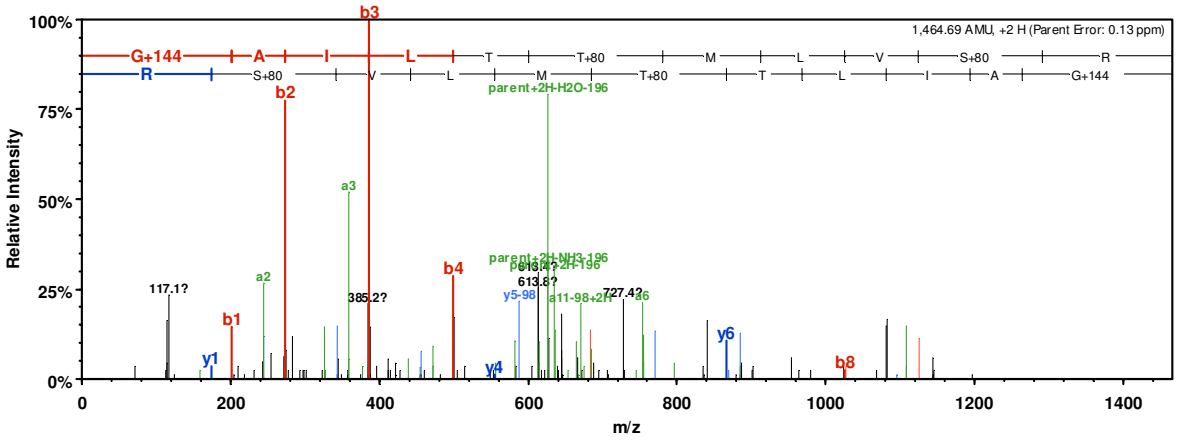
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	259.2		242.1		N+144	1,670.9	835.9	1,653.8	1,652.9	10
2	406.2		389.2		F	1,412.7	706.9	1,395.7	1,394.7	9
3	573.2		556.2	555.2	S+80	1,265.7	633.3	1,248.6	1,247.6	8
4	644.3		627.2	626.2	A	1,098.7	549.8	1,081.6	1,080.6	7
5	715.3		698.3	697.3	A	1,027.6	514.3	1,010.6	1,009.6	6
6	987.5	494.2	970.5	969.5	K+144	956.6	478.8	939.6	938.6	5
7	1,154.5	577.7	1,137.5	1,136.5	S+80	684.4		667.4	666.4	4
8	1,267.6	634.3	1,250.5	1,249.6	L	517.4		500.4		3
9	1,380.7	690.8	1,363.6	1,362.6	L	404.3		387.3		2
10	1,670.9	835.9	1,653.8	1,652.9	K+144	291.2		274.2		1

KCC2D_HUMAN: QEpTVDCLK



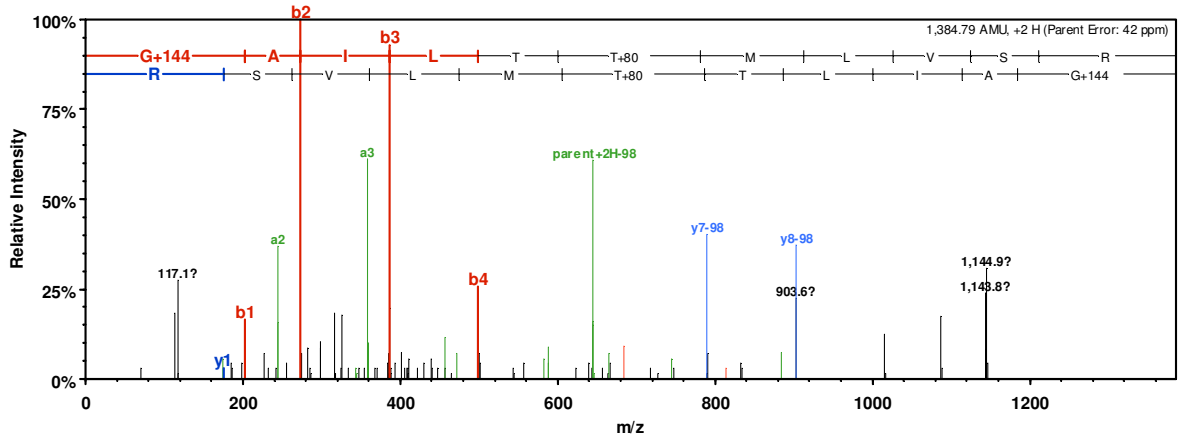
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	273.2		256.1		Q+144	1,360.6	680.8	1,343.6	1,342.6	8
2	402.2		385.2	384.2	E	1,088.5	544.7	1,071.5	1,070.5	7
3	583.2		566.2	565.2	T+80	959.4	480.2	942.4	941.4	6
4	682.3		665.3	664.3	V	778.4		761.4	760.4	5
5	797.3		780.3	779.3	D	679.4		662.3	661.3	4
6	957.4	479.2	940.3	939.3	C+57	564.3		547.3		3
7	1,070.4	535.7	1,053.4	1,052.4	L	404.3		387.3		2
8	1,360.6	680.8	1,343.6	1,342.6	K+144	291.2		274.2		1

KCC2G_HUMAN: GAILTpTMLVpSR



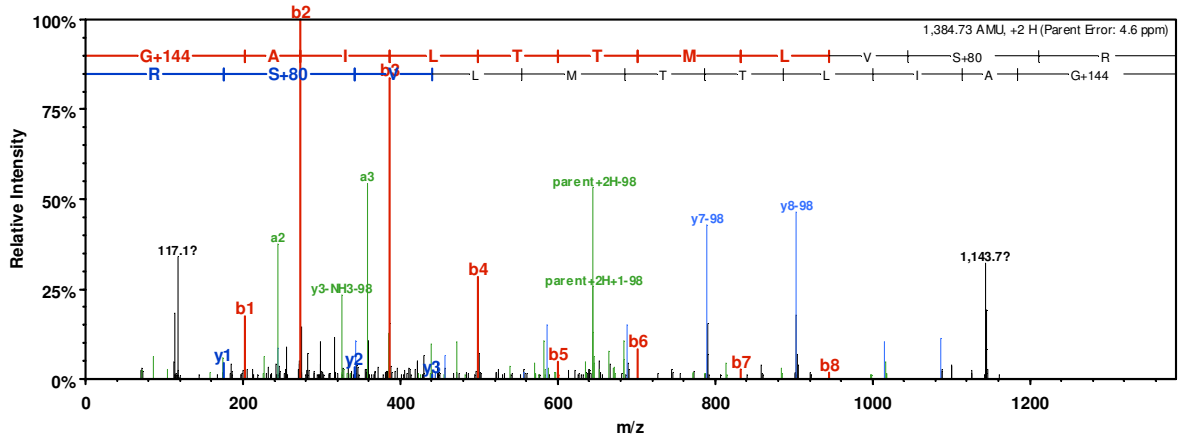
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,465.7	733.4	1,448.7	1,447.7	11
2	273.2				A	1,264.6	632.8	1,247.6	1,246.6	10
3	386.3				I	1,193.5	597.3	1,176.5	1,175.5	9
4	499.3				L	1,080.5	540.7	1,063.4	1,062.4	8
5	600.4			582.4	T	967.4	484.2	950.3	949.4	7
6	781.4	391.2		763.4	T+80	866.3	433.7	849.3	848.3	6
7	912.4	456.7		894.4	M	685.3		668.3	667.3	5
8	1,025.5	513.3		1,007.5	L	554.3		537.2	536.3	4
9	1,124.6	562.8		1,106.6	V	441.2		424.2	423.2	3
10	1,291.6	646.3		1,273.6	S+80	342.1		325.1	324.1	2
11	1,465.7	733.4	1,448.7	1,447.7	R	175.1		158.1		1

KCC2G_HUMAN: GAILTpTMLVSR



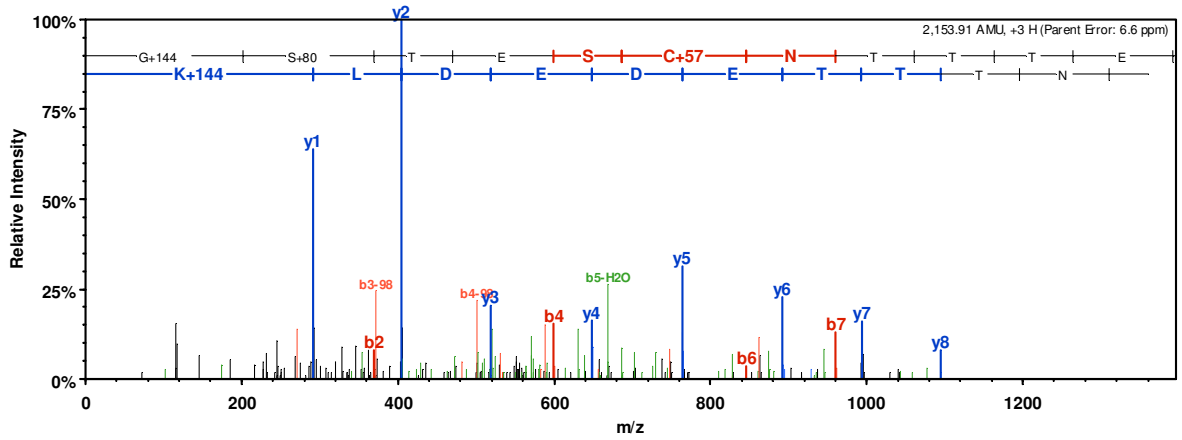
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,385.7	693.4	1,368.7	1,367.7	11
2	273.2				A	1,184.6	592.8	1,167.6	1,166.6	10
3	386.3				I	1,113.6	557.3	1,096.5	1,095.6	9
4	499.3				L	1,000.5	500.7	983.5	982.5	8
5	600.4			582.4	T	887.4	444.2	870.4	869.4	7
6	781.4	391.2		763.4	T+80	786.4	393.7	769.3	768.3	6
7	912.4	456.7		894.4	M	605.3		588.3	587.3	5
8	1,025.5	513.3		1,007.5	L	474.3		457.3	456.3	4
9	1,124.6	562.8		1,106.6	V	361.2		344.2	343.2	3
10	1,211.6	606.3		1,193.6	S	262.2		245.1	244.1	2
11	1,385.7	693.4	1,368.7	1,367.7	R	175.1		158.1		1

KCC2G_HUMAN: GAILTTMLVpSR



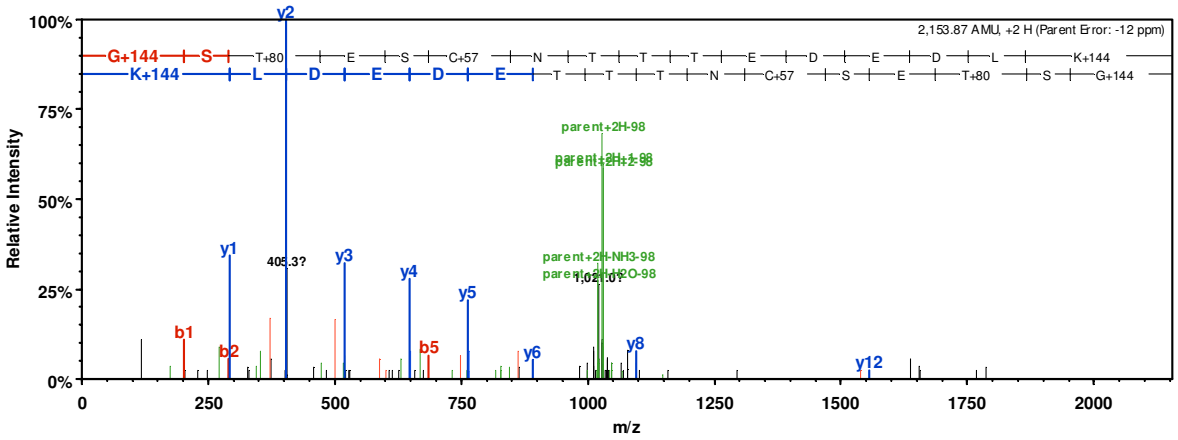
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,385.7	693.4	1,368.7	1,367.7	11
2	273.2				A	1,184.6	592.8	1,167.6	1,166.6	10
3	386.3				I	1,113.6	557.3	1,096.5	1,095.6	9
4	499.3				L	1,000.5	500.7	983.5	982.5	8
5	600.4			582.4	T	887.4	444.2	870.4	869.4	7
6	701.4	351.2		683.4	T	786.4	393.7	769.3	768.3	6
7	832.5	416.7		814.5	M	685.3		668.3	667.3	5
8	945.6	473.3		927.5	L	554.3		537.2	536.3	4
9	1,044.6	522.8		1,026.6	V	441.2		424.2	423.2	3
10	1,211.6	606.3		1,193.6	S+80	342.1		325.1	324.1	2
11	1,385.7	693.4	1,368.7	1,367.7	R	175.1		158.1		1

KCC2G_HUMAN: GpSTESCNTTTEDEDLK



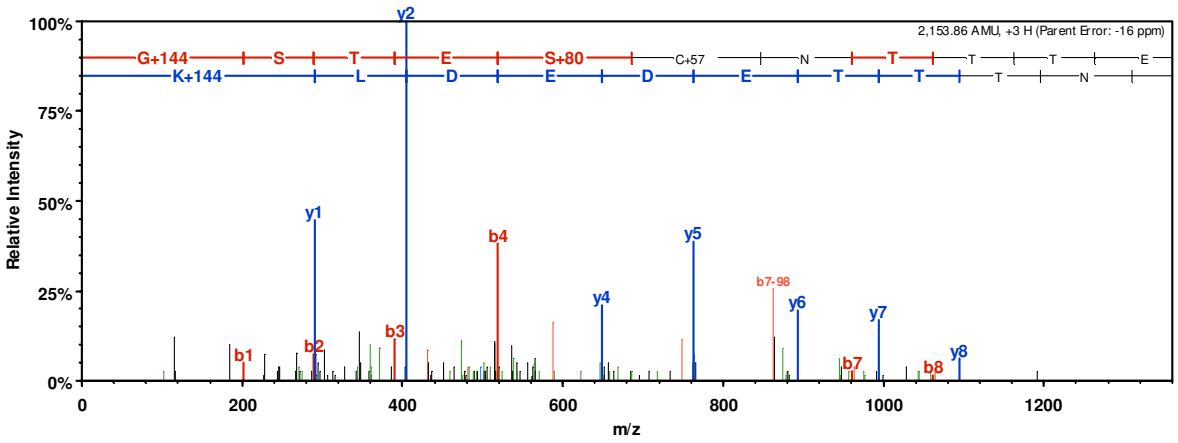
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	2,154.9	1,078.0	2,137.9	2,136.9	16
2	369.1			351.1	S+80	1,953.8	977.4	1,936.7	1,935.8	15
3	470.2			452.2	T	1,786.8	893.9	1,769.8	1,768.8	14
4	599.2			581.2	E	1,685.7	843.4	1,668.7	1,667.7	13
5	686.3			668.2	S	1,556.7	778.8	1,539.7	1,538.7	12
6	846.3	423.6		828.3	C+57	1,469.7	735.3	1,452.6	1,451.6	11
7	960.3	480.7	943.3	942.3	N	1,309.6	655.3	1,292.6	1,291.6	10
8	1,061.4	531.2	1,044.3	1,043.4	T	1,195.6	598.3	1,178.6	1,177.6	9
9	1,162.4	581.7	1,145.4	1,144.4	T	1,094.5	547.8	1,077.5	1,076.5	8
10	1,263.5	632.2	1,246.4	1,245.5	T	993.5	497.2	976.5	975.5	7
11	1,392.5	696.8	1,375.5	1,374.5	E	892.4	446.7	875.4	874.4	6
12	1,507.5	754.3	1,490.5	1,489.5	D	763.4		746.4	745.4	5
13	1,636.6	818.8	1,619.6	1,618.6	E	648.4		631.3	630.4	4
14	1,751.6	876.3	1,734.6	1,733.6	D	519.3		502.3	501.3	3
15	1,864.7	932.8	1,847.7	1,846.7	L	404.3		387.3		2
16	2,154.9	1,078.0	2,137.9	2,136.9	K+144	291.2		274.2		1

KCC2G_HUMAN: GSpTESCNTTTEDEDLK



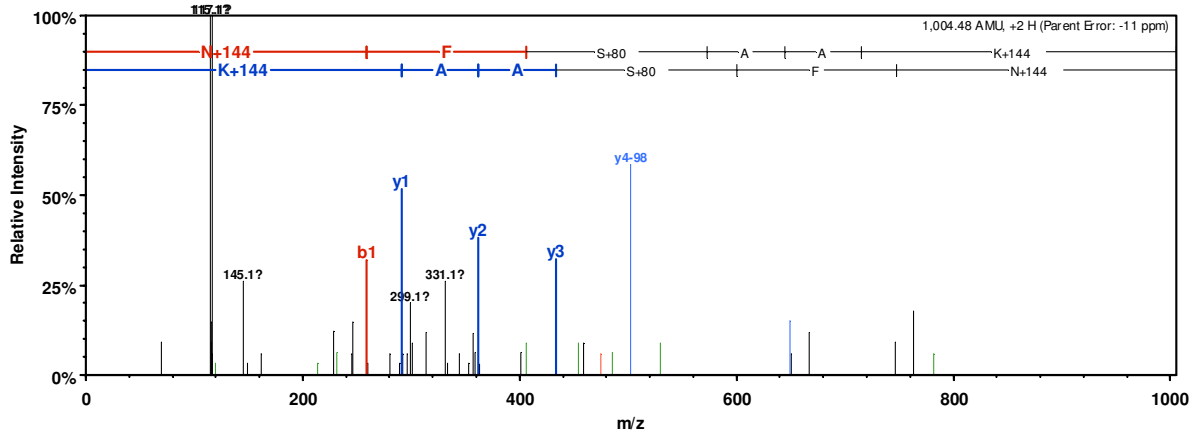
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	2,154.9	1,078.0	2,137.9	2,136.9	16
2	289.2			271.2	S	1,953.8	977.4	1,936.7	1,935.8	15
3	470.2			452.2	T+80	1,866.7	933.9	1,849.7	1,848.7	14
4	599.2			581.2	E	1,685.7	843.4	1,668.7	1,667.7	13
5	686.3			668.2	S	1,556.7	778.8	1,539.7	1,538.7	12
6	846.3	423.6		828.3	C+57	1,469.7	735.3	1,452.6	1,451.6	11
7	960.3	480.7	943.3	942.3	N	1,309.6	655.3	1,292.6	1,291.6	10
8	1,061.4	531.2	1,044.3	1,043.4	T	1,195.6	598.3	1,178.6	1,177.6	9
9	1,162.4	581.7	1,145.4	1,144.4	T	1,094.5	547.8	1,077.5	1,076.5	8
10	1,263.5	632.2	1,246.4	1,245.5	T	993.5	497.2	976.5	975.5	7
11	1,392.5	696.8	1,375.5	1,374.5	E	892.4	446.7	875.4	874.4	6
12	1,507.5	754.3	1,490.5	1,489.5	D	763.4		746.4	745.4	5
13	1,636.6	818.8	1,619.6	1,618.6	E	648.4		631.3	630.4	4
14	1,751.6	876.3	1,734.6	1,733.6	D	519.3		502.3	501.3	3
15	1,864.7	932.8	1,847.7	1,846.7	L	404.3		387.3		2
16	2,154.9	1,078.0	2,137.9	2,136.9	K+144	291.2		274.2		1

KCC2G_HUMAN: GSTEpSCNTTTEDEDLK



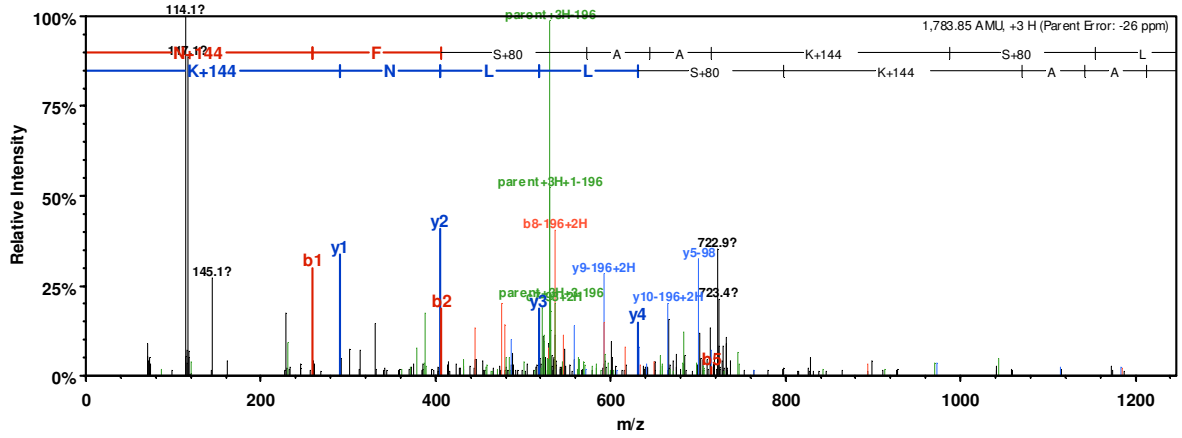
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	2,154.9	1,078.0	2,137.9	2,136.9	16
2	289.2			271.2	S	1,953.8	977.4	1,936.7	1,935.8	15
3	390.2			372.2	T	1,866.7	933.9	1,849.7	1,848.7	14
4	519.3			501.2	E	1,765.7	883.4	1,748.7	1,747.7	13
5	686.3			668.2	S+80	1,636.7	818.8	1,619.6	1,618.6	12
6	846.3	423.6		828.3	C+57	1,469.7	735.3	1,452.6	1,451.6	11
7	960.3	480.7	943.3	942.3	N	1,309.6	655.3	1,292.6	1,291.6	10
8	1,061.4	531.2	1,044.3	1,043.4	T	1,195.6	598.3	1,178.6	1,177.6	9
9	1,162.4	581.7	1,145.4	1,144.4	T	1,094.5	547.8	1,077.5	1,076.5	8
10	1,263.5	632.2	1,246.4	1,245.5	T	993.5	497.2	976.5	975.5	7
11	1,392.5	696.8	1,375.5	1,374.5	E	892.4	446.7	875.4	874.4	6
12	1,507.5	754.3	1,490.5	1,489.5	D	763.4		746.4	745.4	5
13	1,636.6	818.8	1,619.6	1,618.6	E	648.4		631.3	630.4	4
14	1,751.6	876.3	1,734.6	1,733.6	D	519.3		502.3	501.3	3
15	1,864.7	932.8	1,847.7	1,846.7	L	404.3		387.3		2
16	2,154.9	1,078.0	2,137.9	2,136.9	K+144	291.2		274.2		1

KCC2G_HUMAN: NFpSAAK



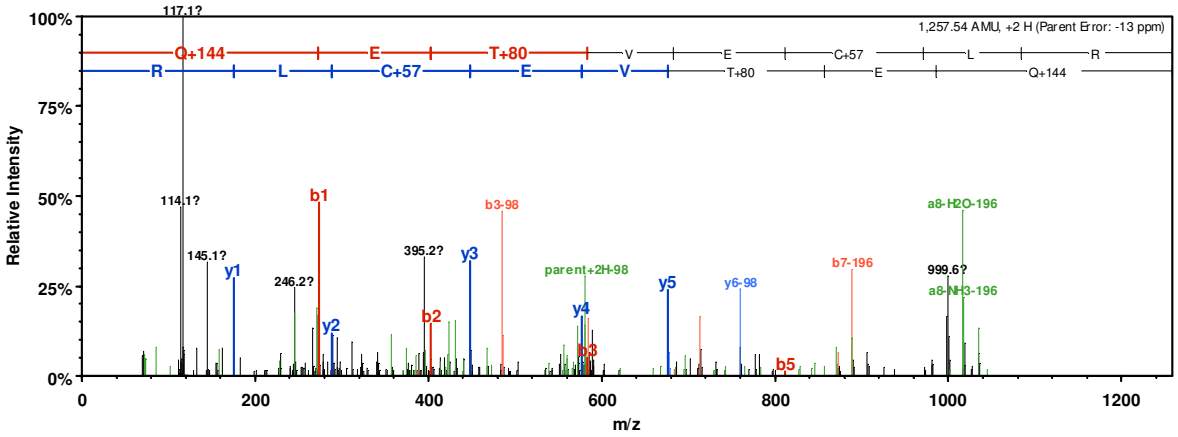
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	259.2		242.1		N+144	1,005.5	503.3	988.5	987.5	6
2	406.2		389.2		F	747.4		730.3	729.3	5
3	573.2		556.2	555.2	S+80	600.3		583.3	582.3	4
4	644.3		627.2	626.2	A	433.3		416.3		3
5	715.3		698.3	697.3	A	362.3		345.2		2
6	1,005.5	503.3	988.5	987.5	K+144	291.2		274.2		1

KCC2G_HUMAN: NFpSAAKpSLLNK



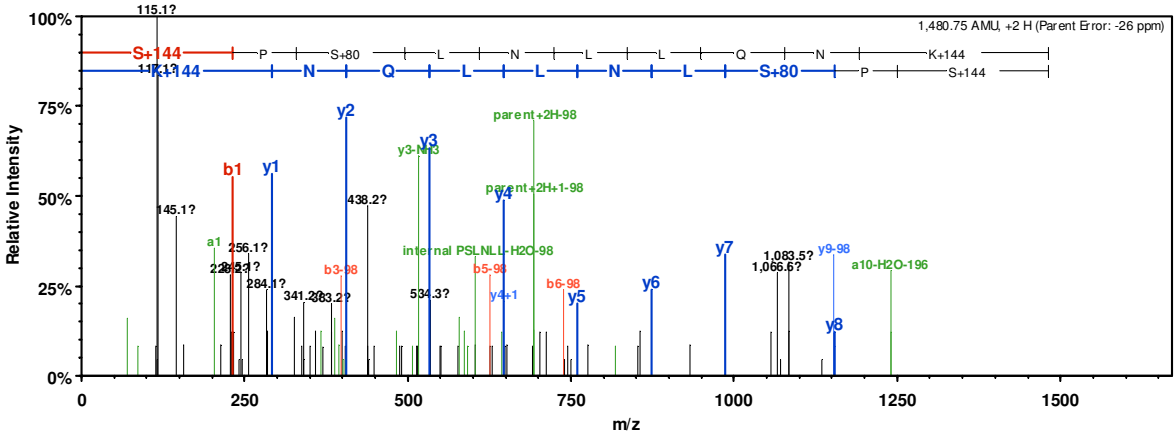
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	259.2		242.1		N+144	1,784.9	893.0	1,767.9	1,766.9	11
2	406.2		389.2		F	1,526.8	763.9	1,509.7	1,508.8	10
3	573.2		556.2	555.2	S+80	1,379.7	690.4	1,362.7	1,361.7	9
4	644.3		627.2	626.2	A	1,212.7	606.9	1,195.7	1,194.7	8
5	715.3		698.3	697.3	A	1,141.7	571.3	1,124.6	1,123.6	7
6	987.5	494.2	970.5	969.5	K+144	1,070.6	535.8	1,053.6	1,052.6	6
7	1,154.5	577.7	1,137.5	1,136.5	S+80	798.4		781.4	780.4	5
8	1,267.6	634.3	1,250.5	1,249.6	L	631.4		614.4		4
9	1,380.7	690.8	1,363.6	1,362.6	L	518.3		501.3		3
10	1,494.7	747.9	1,477.7	1,476.7	N	405.3		388.2		2
11	1,784.9	893.0	1,767.9	1,766.9	K+144	291.2		274.2		1

KCC2G_HUMAN: QEpTVECLR



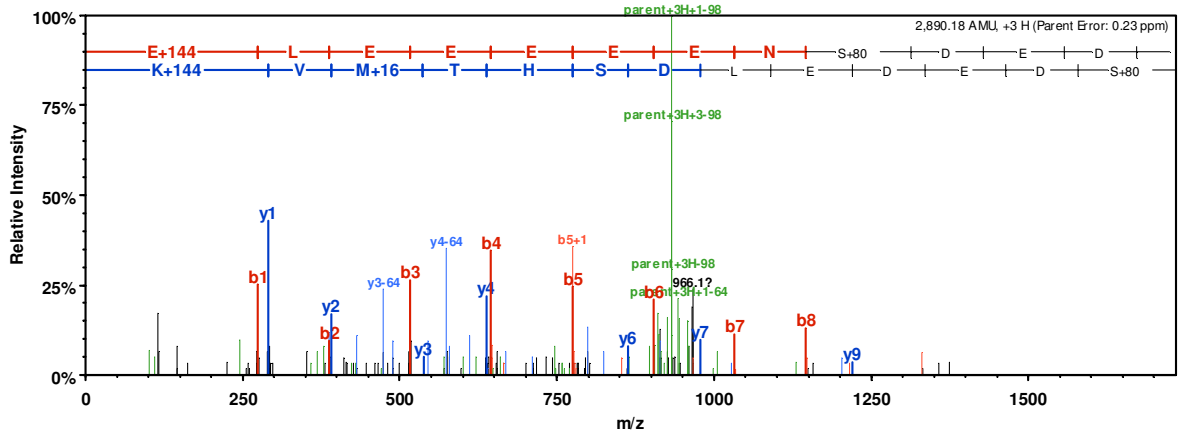
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	273.2		256.1		Q+144	1,258.6	629.8	1,241.5	1,240.6	8
2	402.2		385.2	384.2	E	986.4	493.7	969.4	968.4	7
3	583.2		566.2	565.2	T+80	857.4	429.2	840.3	839.3	6
4	682.3		665.3	664.3	V	676.3		659.3	658.3	5
5	811.3		794.3	793.3	E	577.3		560.3	559.3	4
6	971.4	486.2	954.3	953.4	C+57	448.2		431.2		3
7	1,084.5	542.7	1,067.4	1,066.4	L	288.2		271.2		2
8	1,258.6	629.8	1,241.5	1,240.6	R	175.1		158.1		1

RIPK2_HUMAN: SPpSLNLLQNK



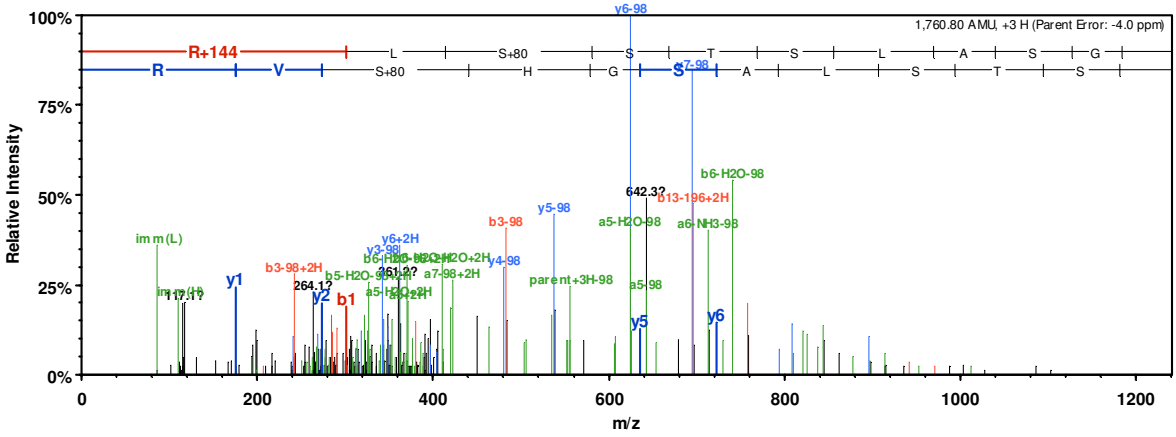
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,481.8	741.4	1,464.8	1,463.8	10
2	329.2			311.2	P	1,250.7	625.8	1,233.6	1,232.7	9
3	496.2			478.2	S+80	1,153.6	577.3	1,136.6	1,135.6	8
4	609.3			591.3	L	986.6	493.8	969.6		7
5	723.3		706.3	705.3	N	873.5	437.3	856.5		6
6	836.4	418.7	819.4	818.4	L	759.5		742.5		5
7	949.5	475.2	932.5	931.5	L	646.4		629.4		4
8	1,077.5	539.3	1,060.5	1,059.5	Q	533.3		516.3		3
9	1,191.6	596.3	1,174.6	1,173.6	N	405.3		388.2		2
10	1,481.8	741.4	1,464.8	1,463.8	K+144	291.2		274.2		1

STK3_HUMAN: ELEEEEENpSDEDELDSHTMVK



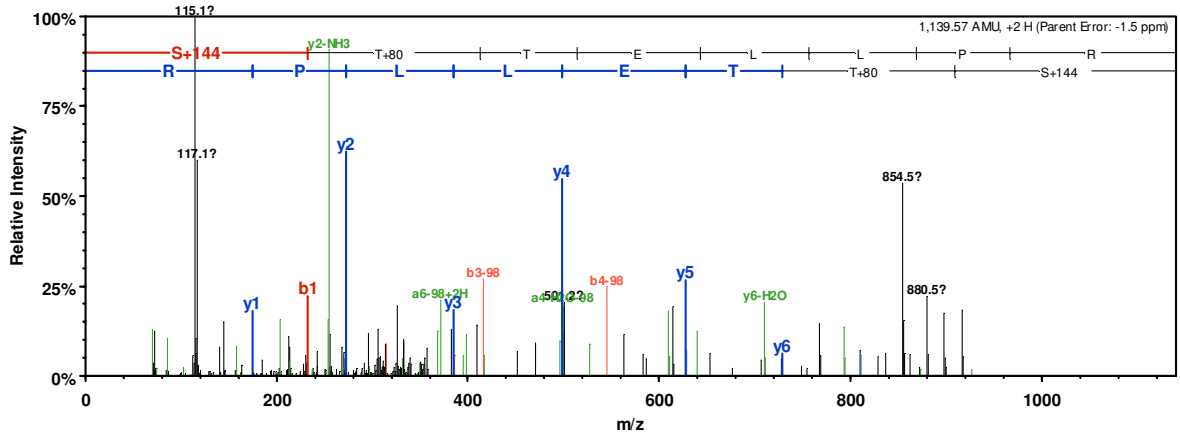
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	274.2			256.1	E+144	2,891.2	1,446.1	2,874.2	2,873.2	21
2	387.2			369.2	L	2,618.0	1,309.5	2,601.0	2,600.0	20
3	516.3			498.3	E	2,505.0	1,253.0	2,487.9	2,487.0	19
4	645.3			627.3	E	2,375.9	1,188.5	2,358.9	2,357.9	18
5	774.4			756.4	E	2,246.9	1,123.9	2,229.9	2,228.9	17
6	903.4	452.2		885.4	E	2,117.8	1,059.4	2,100.8	2,099.8	16
7	1,032.4	516.7		1,014.4	E	1,988.8	994.9	1,971.8	1,970.8	15
8	1,146.5	573.8	1,129.5	1,128.5	N	1,859.7	930.4	1,842.7	1,841.7	14
9	1,313.5	657.2	1,296.5	1,295.5	S+80	1,745.7	873.4	1,728.7	1,727.7	13
10	1,428.5	714.8	1,411.5	1,410.5	D	1,578.7	789.9	1,561.7	1,560.7	12
11	1,557.6	779.3	1,540.5	1,539.5	E	1,463.7	732.3	1,446.7	1,445.7	11
12	1,672.6	836.8	1,655.6	1,654.6	D	1,334.6	667.8	1,317.6	1,316.6	10
13	1,801.6	901.3	1,784.6	1,783.6	E	1,219.6	610.3	1,202.6	1,201.6	9
14	1,914.7	957.9	1,897.7	1,896.7	L	1,090.6	545.8	1,073.5	1,072.6	8
15	2,029.7	1,015.4	2,012.7	2,011.7	D	977.5	489.2	960.5	959.5	7
16	2,116.8	1,058.9	2,099.7	2,098.8	S	862.5	431.7	845.4	844.4	6
17	2,253.8	1,127.4	2,236.8	2,235.8	H	775.4	388.2	758.4	757.4	5
18	2,354.9	1,177.9	2,337.9	2,336.9	T	638.4		621.3	620.4	4
19	2,501.9	1,251.5	2,484.9	2,483.9	M+16	537.3		520.3		3
20	2,601.0	1,301.0	2,584.0	2,583.0	V	390.3		373.3		2
21	2,891.2	1,446.1	2,874.2	2,873.2	K+144	291.2		274.2		1

KPCD2_HUMAN: RLpSSTSLASGHpSVR



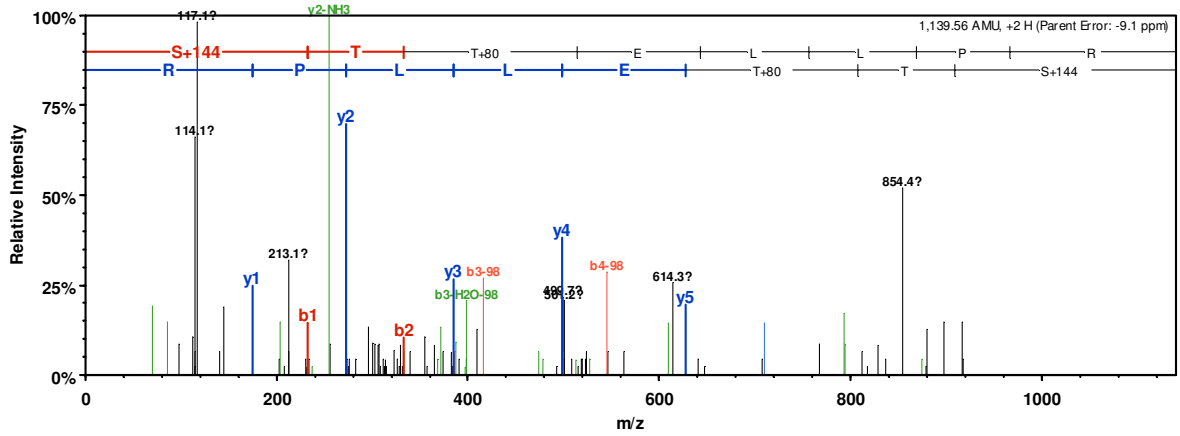
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	301.2	151.1	284.2		R+144	1,761.8	881.4	1,744.8	1,743.8	14
2	414.3	207.7	397.3		L	1,461.6	731.3	1,444.6	1,443.6	13
3	581.3	291.2	564.3	563.3	S+80	1,348.5	674.8	1,331.5	1,330.5	12
4	668.3	334.7	651.3	650.3	S	1,181.5	591.3	1,164.5	1,163.5	11
5	769.4	385.2	752.3	751.4	T	1,094.5	547.8	1,077.5	1,076.5	10
6	856.4	428.7	839.4	838.4	S	993.5	497.2	976.4	975.4	9
7	969.5	485.2	952.5	951.5	L	906.4	453.7	889.4	888.4	8
8	1,040.5	520.8	1,023.5	1,022.5	A	793.3	397.2	776.3	775.3	7
9	1,127.6	564.3	1,110.5	1,109.5	S	722.3	361.7	705.3	704.3	6
10	1,184.6	592.8	1,167.6	1,166.6	G	635.3	318.1	618.2	617.3	5
11	1,321.6	661.3	1,304.6	1,303.6	H	578.2	289.6	561.2	560.2	4
12	1,488.6	744.8	1,471.6	1,470.6	S+80	441.2		424.2	423.2	3
13	1,587.7	794.4	1,570.7	1,569.7	V	274.2		257.2		2
14	1,761.8	881.4	1,744.8	1,743.8	R	175.1		158.1		1

KPCD2_HUMAN: SpTTELLPR



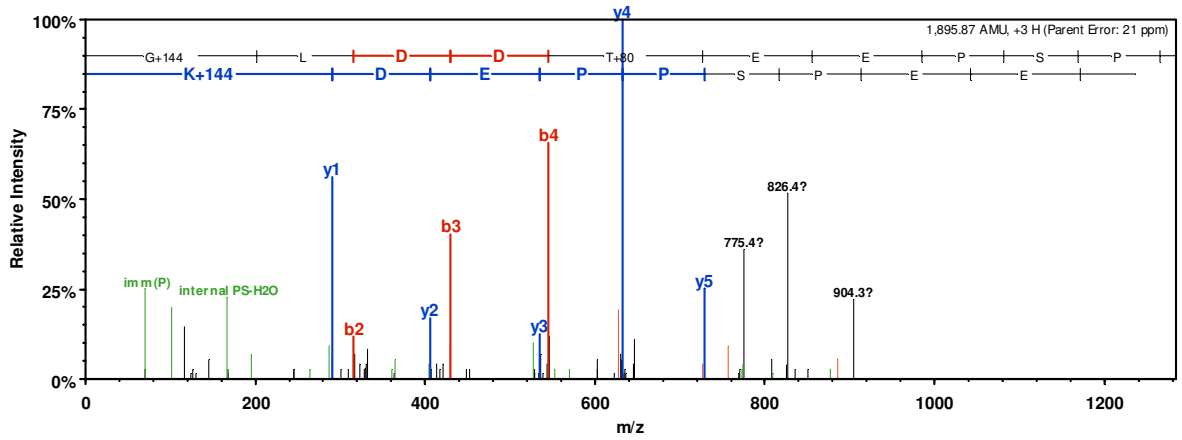
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,140.6	570.8	1,123.6	1,122.6	8
2	413.2			395.1	T+80	909.4	455.2	892.4	891.4	7
3	514.2			496.2	T	728.4	364.7	711.4	710.4	6
4	643.2			625.2	E	627.4		610.4	609.4	5
5	756.3			738.3	L	498.3		481.3		4
6	869.4	435.2		851.4	L	385.3		368.2		3
7	966.5	483.7		948.5	P	272.2		255.1		2
8	1,140.6	570.8	1,123.6	1,122.6	R	175.1		158.1		1

KPCD2_HUMAN: STpTELLPR



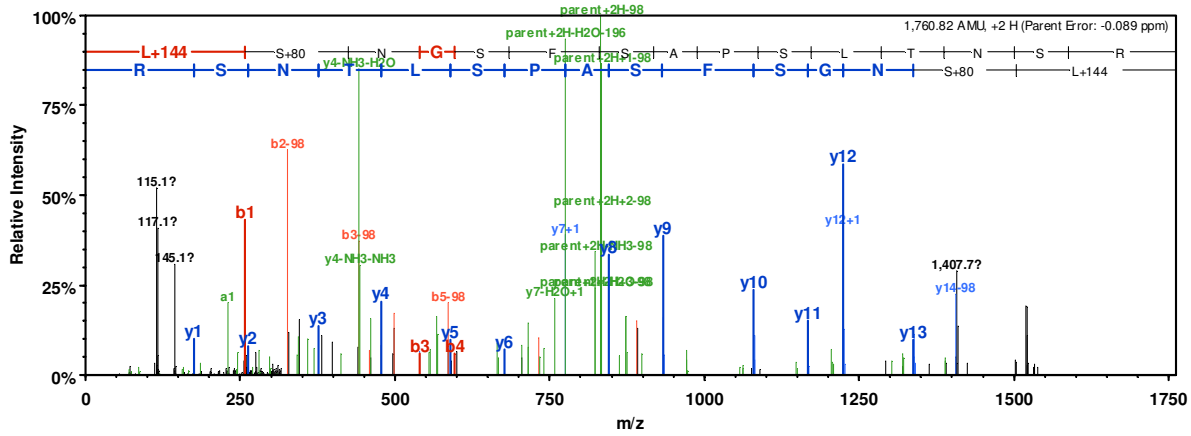
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,140.6	570.8	1,123.6	1,122.6	8
2	333.2			315.2	T	909.4	455.2	892.4	891.4	7
3	514.2			496.2	T+80	808.4	404.7	791.4	790.4	6
4	643.2			625.2	E	627.4		610.4	609.4	5
5	756.3			738.3	L	498.3		481.3		4
6	869.4	435.2		851.4	L	385.3		368.2		3
7	966.5	483.7		948.5	P	272.2		255.1		2
8	1,140.6	570.8	1,123.6	1,122.6	R	175.1		158.1		1

KPCD3_HUMAN: GLDDpTEEPSPPEDK



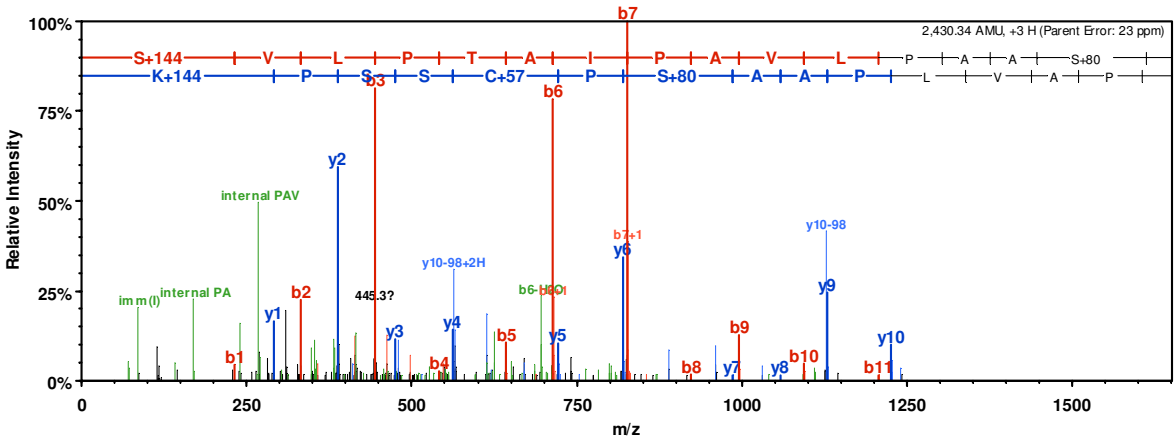
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,896.8	948.9	1,879.8	1,878.8	14
2	315.2				L	1,695.7	848.4	1,678.7	1,677.7	13
3	430.2			412.2	D	1,582.6	791.8	1,565.6	1,564.6	12
4	545.3			527.3	D	1,467.6	734.3	1,450.6	1,449.6	11
5	726.3			708.3	T+80	1,352.6	676.8	1,335.5	1,334.6	10
6	855.3	428.2		837.3	E	1,171.6	586.3	1,154.5	1,153.6	9
7	984.4	492.7		966.4	E	1,042.5	521.8	1,025.5	1,024.5	8
8	1,081.4	541.2		1,063.4	P	913.5	457.2	896.4	895.5	7
9	1,168.5	584.7		1,150.4	S	816.4	408.7	799.4	798.4	6
10	1,265.5	633.3		1,247.5	P	729.4		712.4	711.4	5
11	1,362.6	681.8		1,344.5	P	632.3		615.3	614.3	4
12	1,491.6	746.3		1,473.6	E	535.3		518.3	517.3	3
13	1,606.6	803.8		1,588.6	D	406.2		389.2	388.2	2
14	1,896.8	948.9	1,879.8	1,878.8	K+144	291.2		274.2		1

KPCD3_HUMAN: LpSNGSFSAPSLTNSR



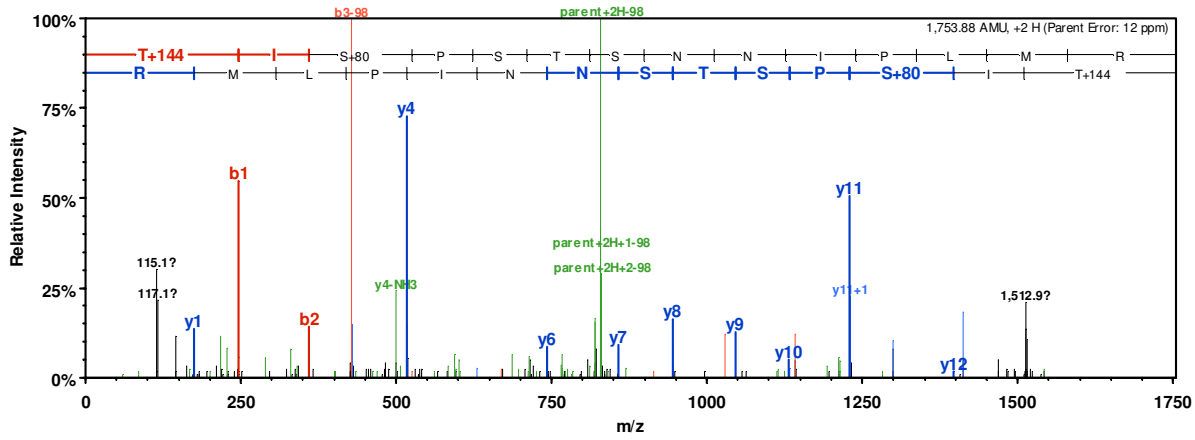
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				L+144	1,761.8	881.4	1,744.8	1,743.8	15
2	425.2			407.2	S+80	1,504.6	752.8	1,487.6	1,486.6	14
3	539.2		522.2	521.2	N	1,337.6	669.3	1,320.6	1,319.6	13
4	596.3		579.2	578.2	G	1,223.6	612.3	1,206.6	1,205.6	12
5	683.3		666.3	665.3	S	1,166.6	583.8	1,149.6	1,148.6	11
6	830.4	415.7	813.3	812.3	F	1,079.5	540.3	1,062.5	1,061.5	10
7	917.4	459.2	900.4	899.4	S	932.5	466.7	915.5	914.5	9
8	988.4	494.7	971.4	970.4	A	845.4	423.2	828.4	827.4	8
9	1,085.5	543.2	1,068.5	1,067.5	P	774.4	387.7	757.4	756.4	7
10	1,172.5	586.8	1,155.5	1,154.5	S	677.4	339.2	660.3	659.3	6
11	1,285.6	643.3	1,268.6	1,267.6	L	590.3		573.3	572.3	5
12	1,386.6	693.8	1,369.6	1,368.6	T	477.2		460.2	459.2	4
13	1,500.7	750.8	1,483.7	1,482.7	N	376.2		359.2	358.2	3
14	1,587.7	794.4	1,570.7	1,569.7	S	262.2		245.1	244.1	2
15	1,761.8	881.4	1,744.8	1,743.8	R	175.1		158.1		1

KPCD3_HUMAN: SVLPTAIPAVLPAApSPCSSPK



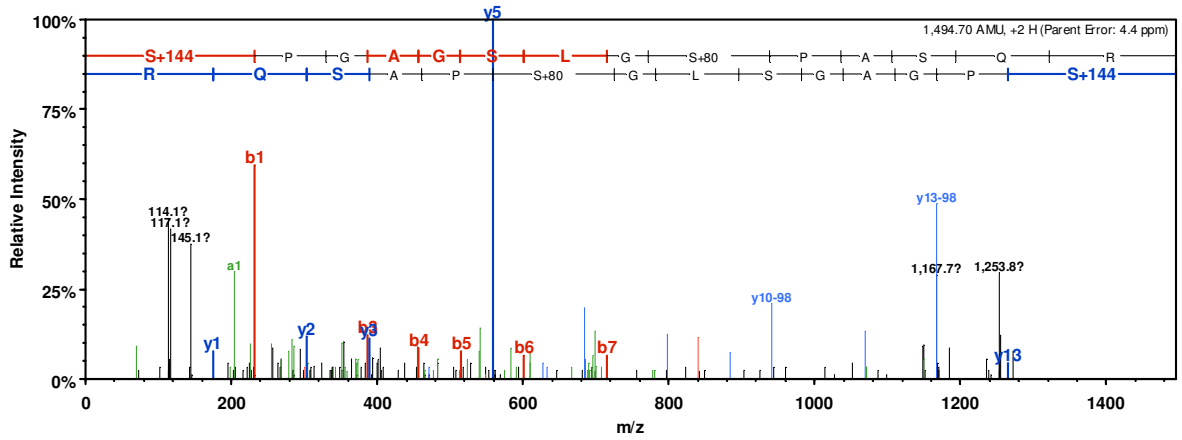
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	2,431.3	1,216.1	2,414.3	2,413.3	21
2	331.2			313.2	V	2,200.2	1,100.6	2,183.1	2,182.1	20
3	444.3			426.3	L	2,101.1	1,051.0	2,084.1	2,083.1	19
4	541.3			523.3	P	1,988.0	994.5	1,971.0	1,970.0	18
5	642.4			624.4	T	1,891.0	946.0	1,873.9	1,872.9	17
6	713.4	357.2		695.4	A	1,789.9	895.5	1,772.9	1,771.9	16
7	826.5	413.8		808.5	I	1,718.9	859.9	1,701.8	1,700.9	15
8	923.6	462.3		905.6	P	1,605.8	803.4	1,588.8	1,587.8	14
9	994.6	497.8		976.6	A	1,508.7	754.9	1,491.7	1,490.7	13
10	1,093.7	547.3		1,075.7	V	1,437.7	719.4	1,420.7	1,419.7	12
11	1,206.8	603.9		1,188.7	L	1,338.6	669.8	1,321.6	1,320.6	11
12	1,303.8	652.4		1,285.8	P	1,225.5	613.3	1,208.5	1,207.5	10
13	1,374.8	687.9		1,356.8	A	1,128.5	564.7	1,111.5	1,110.5	9
14	1,445.9	723.4		1,427.9	A	1,057.5	529.2	1,040.4	1,039.4	8
15	1,612.9	806.9		1,594.9	S+80	986.4	493.7	969.4	968.4	7
16	1,709.9	855.5		1,691.9	P	819.4	410.2	802.4	801.4	6
17	1,870.0	935.5		1,852.0	C+57	722.4		705.3	704.4	5
18	1,957.0	979.0		1,939.0	S	562.3		545.3	544.3	4
19	2,044.0	1,022.5		2,026.0	S	475.3		458.3	457.3	3
20	2,141.1	1,071.0		2,123.1	P	388.3		371.2		2
21	2,431.3	1,216.1	2,414.3	2,413.3	K+144	291.2		274.2		1

KPCD3_HUMAN: TIpSPSTSNNIPLMR



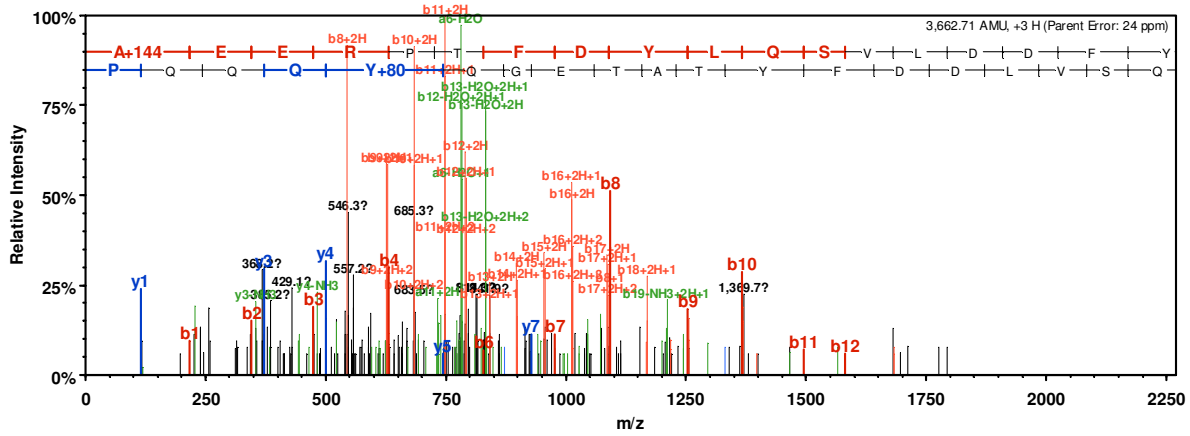
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	246.2			228.1	T+144	1,754.9	877.9	1,737.8	1,736.9	14
2	359.2			341.2	I	1,509.7	755.4	1,492.7	1,491.7	13
3	526.2			508.2	S+80	1,396.6	698.8	1,379.6	1,378.6	12
4	623.3			605.3	P	1,229.6	615.3	1,212.6	1,211.6	11
5	710.3			692.3	S	1,132.6	566.8	1,115.6	1,114.6	10
6	811.4	406.2		793.4	T	1,045.5	523.3	1,028.5	1,027.5	9
7	898.4	449.7		880.4	S	944.5	472.8	927.5	926.5	8
8	1,012.4	506.7	995.4	994.4	N	857.5	429.2	840.4		7
9	1,126.5	563.7	1,109.5	1,108.5	N	743.4	372.2	726.4		6
10	1,239.6	620.3	1,222.5	1,221.6	I	629.4		612.4		5
11	1,336.6	668.8	1,319.6	1,318.6	P	516.3		499.3		4
12	1,449.7	725.4	1,432.7	1,431.7	L	419.2		402.2		3
13	1,580.8	790.9	1,563.7	1,562.7	M	306.2		289.1		2
14	1,754.9	877.9	1,737.8	1,736.9	R	175.1		158.1		1

LIMK1_HUMAN: SPGAGSLGpSPASQR



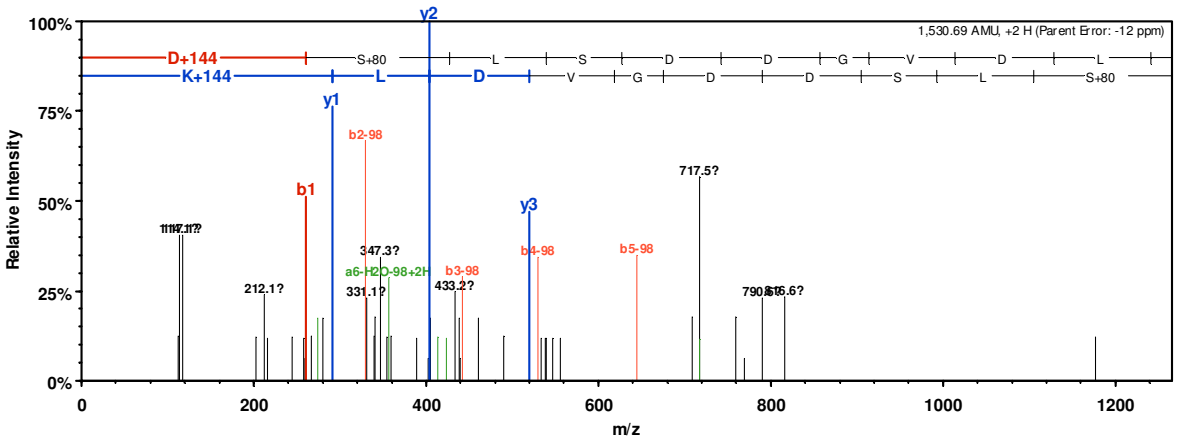
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,495.7	748.4	1,478.7	1,477.7	14
2	329.2			311.2	P	1,264.6	632.8	1,247.5	1,246.6	13
3	386.2			368.2	G	1,167.5	584.3	1,150.5	1,149.5	12
4	457.3			439.2	A	1,110.5	555.8	1,093.5	1,092.5	11
5	514.3			496.3	G	1,039.5	520.2	1,022.4	1,021.4	10
6	601.3	301.2		583.3	S	982.4	491.7	965.4	964.4	9
7	714.4	357.7		696.4	L	895.4	448.2	878.4	877.4	8
8	771.4	386.2		753.4	G	782.3	391.7	765.3	764.3	7
9	938.4	469.7		920.4	S+80	725.3	363.2	708.3	707.3	6
10	1,035.5	518.2		1,017.5	P	558.3		541.3	540.3	5
11	1,106.5	553.8		1,088.5	A	461.2		444.2	443.2	4
12	1,193.5	597.3		1,175.5	S	390.2		373.2	372.2	3
13	1,321.6	661.3	1,304.6	1,303.6	Q	303.2		286.2		2
14	1,495.7	748.4	1,478.7	1,477.7	R	175.1		158.1		1

LYN_HUMAN: AEERPTFDYLQSVLDDFYTATEGQpYQQQP



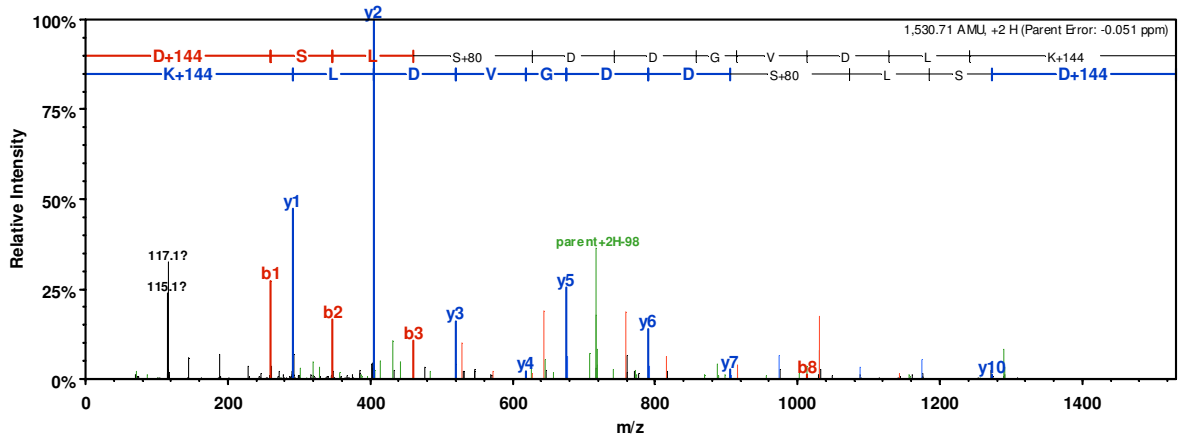
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	216.1				A+144	3,663.6	1,832.3	3,646.6	3,645.6	29
2	345.2			327.2	E	3,448.5	1,724.7	3,431.5	3,430.5	28
3	474.2			456.2	E	3,319.4	1,660.2	3,302.4	3,301.4	27
4	630.3	315.7	613.3	612.3	R	3,190.4	1,595.7	3,173.4	3,172.4	26
5	727.4	364.2	710.4	709.4	P	3,034.3		3,017.3	3,016.3	25
6	828.4	414.7	811.4	810.4	T	2,937.3		2,920.2	2,919.2	24
7	975.5	488.3	958.5	957.5	F	2,836.2		2,819.2	2,818.2	23
8	1,090.5	545.8	1,073.5	1,072.5	D	2,689.1		2,672.1	2,671.1	22
9	1,253.6	627.3	1,236.6	1,235.6	Y	2,574.1		2,557.1	2,556.1	21
10	1,366.7	683.8	1,349.7	1,348.7	L	2,411.0		2,394.0	2,393.0	20
11	1,494.7	747.9	1,477.7	1,476.7	Q	2,298.0		2,280.9	2,280.0	19
12	1,581.8	791.4	1,564.7	1,563.8	S	2,169.9		2,152.9	2,151.9	18
13	1,680.8	840.9	1,663.8	1,662.8	V	2,082.9		2,065.8	2,064.9	17
14	1,793.9	897.5	1,776.9	1,775.9	L	1,983.8		1,966.8	1,965.8	16
15	1,908.9	955.0	1,891.9	1,890.9	D	1,870.7		1,853.7	1,852.7	15
16	2,024.0	1,012.5	2,006.9	2,006.0	D	1,755.7		1,738.7	1,737.7	14
17	2,171.0	1,086.0	2,154.0	2,153.0	F	1,640.7		1,623.6	1,622.7	13
18	2,334.1	1,167.6	2,317.1	2,316.1	Y	1,493.6		1,476.6	1,475.6	12
19	2,435.2	1,218.1	2,418.1	2,417.1	T	1,330.5		1,313.5	1,312.5	11
20	2,506.2	1,253.6	2,489.2	2,488.2	A	1,229.5		1,212.5	1,211.5	10
21	2,607.2	1,304.1	2,590.2	2,589.2	T	1,158.4		1,141.4	1,140.4	9
22	2,736.3	1,368.6	2,719.3	2,718.3	E	1,057.4		1,040.4	1,039.4	8
23	2,793.3	1,397.2	2,776.3	2,775.3	G	928.4		911.3		7
24	2,921.4	1,461.2	2,904.3	2,903.3	Q	871.3		854.3		6
25	3,164.4	1,582.7	3,147.4	3,146.4	Y+80	743.3		726.3		5
26	3,292.4	1,646.7	3,275.4	3,274.4	Q	500.2		483.2		4
27	3,420.5	1,710.8	3,403.5	3,402.5	Q	372.2		355.2		3
28	3,548.6	1,774.8	3,531.5	3,530.6	Q	244.1		227.1		2
29	3,663.6	1,832.3	3,646.6	3,645.6	P	116.1				1

LYN_HUMAN: DpSLSDDGVDLK



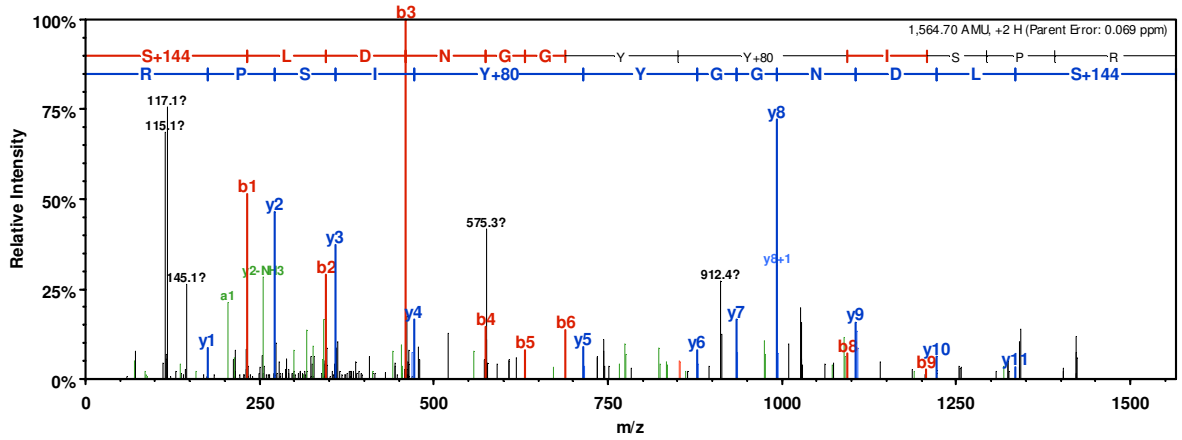
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	260.1			242.1	D+144	1,531.7	766.4	1,514.7	1,513.7	11
2	427.1			409.1	S+80	1,272.6	636.8	1,255.6	1,254.6	10
3	540.2			522.2	L	1,105.6	553.3	1,088.6	1,087.6	9
4	627.3			609.2	S	992.5	496.8	975.5	974.5	8
5	742.3			724.3	D	905.5	453.2	888.4	887.5	7
6	857.3	429.2		839.3	D	790.4	395.7	773.4	772.4	6
7	914.3	457.7		896.3	G	675.4		658.4	657.4	5
8	1,013.4	507.2		995.4	V	618.4		601.4	600.4	4
9	1,128.4	564.7		1,110.4	D	519.3		502.3	501.3	3
10	1,241.5	621.3		1,223.5	L	404.3		387.3		2
11	1,531.7	766.4	1,514.7	1,513.7	K+144	291.2		274.2		1

LYN_HUMAN: DSLpSDDGVDLK



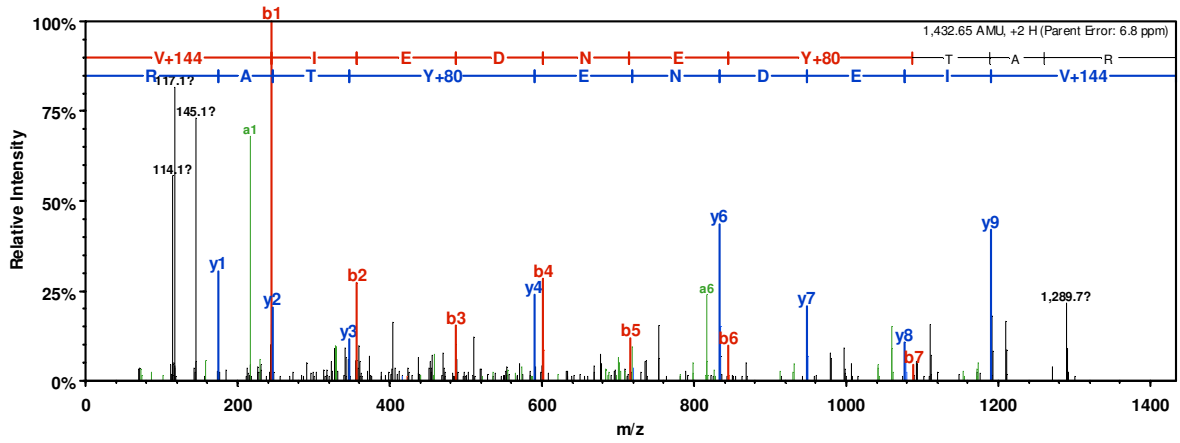
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	260.1			242.1	D+144	1,531.7	766.4	1,514.7	1,513.7	11
2	347.2			329.2	S	1,272.6	636.8	1,255.6	1,254.6	10
3	460.3			442.2	L	1,185.6	593.3	1,168.5	1,167.5	9
4	627.3			609.2	S+80	1,072.5	536.7	1,055.4	1,054.5	8
5	742.3			724.3	D	905.5	453.2	888.4	887.5	7
6	857.3	429.2		839.3	D	790.4	395.7	773.4	772.4	6
7	914.3	457.7		896.3	G	675.4		658.4	657.4	5
8	1,013.4	507.2		995.4	V	618.4		601.4	600.4	4
9	1,128.4	564.7		1,110.4	D	519.3		502.3	501.3	3
10	1,241.5	621.3		1,223.5	L	404.3		387.3		2
11	1,531.7	766.4	1,514.7	1,513.7	K+144	291.2		274.2		1

LYN_HUMAN: SLDNGGYpYISPR



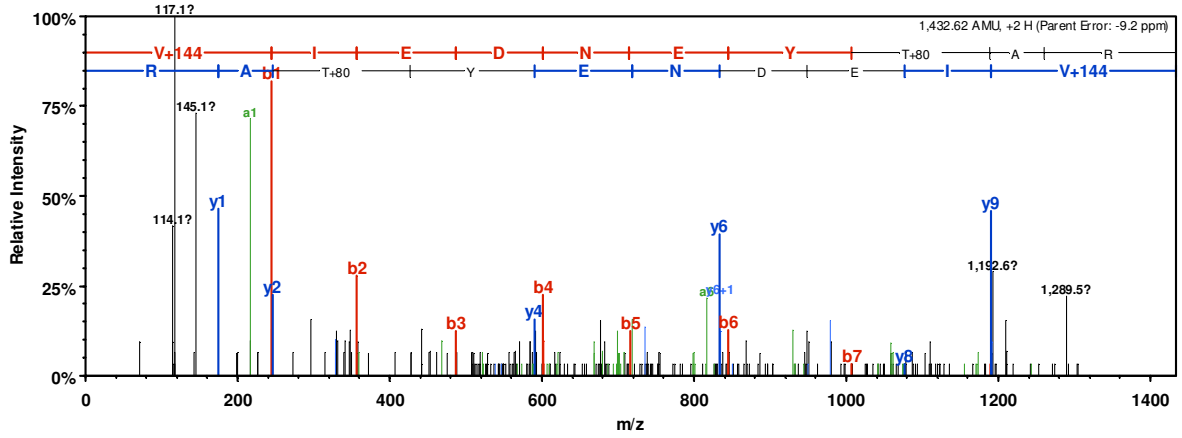
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,565.7	783.4	1,548.7	1,547.7	12
2	345.2			327.2	L	1,334.6	667.8	1,317.6	1,316.6	11
3	460.3			442.2	D	1,221.5	611.3	1,204.5	1,203.5	10
4	574.3		557.3	556.3	N	1,106.5	553.7	1,089.4	1,088.5	9
5	631.3		614.3	613.3	G	992.4	496.7	975.4	974.4	8
6	688.3	344.7	671.3	670.3	G	935.4	468.2	918.4	917.4	7
7	851.4	426.2	834.4	833.4	Y	878.4	439.7	861.4	860.4	6
8	1,094.4	547.7	1,077.4	1,076.4	Y+80	715.3		698.3	697.3	5
9	1,207.5	604.3	1,190.5	1,189.5	I	472.3		455.3	454.3	4
10	1,294.5	647.8	1,277.5	1,276.5	S	359.2		342.2	341.2	3
11	1,391.6	696.3	1,374.6	1,373.6	P	272.2		255.1		2
12	1,565.7	783.4	1,548.7	1,547.7	R	175.1		158.1		1

LYN_HUMAN: VIEDNEpYTAR



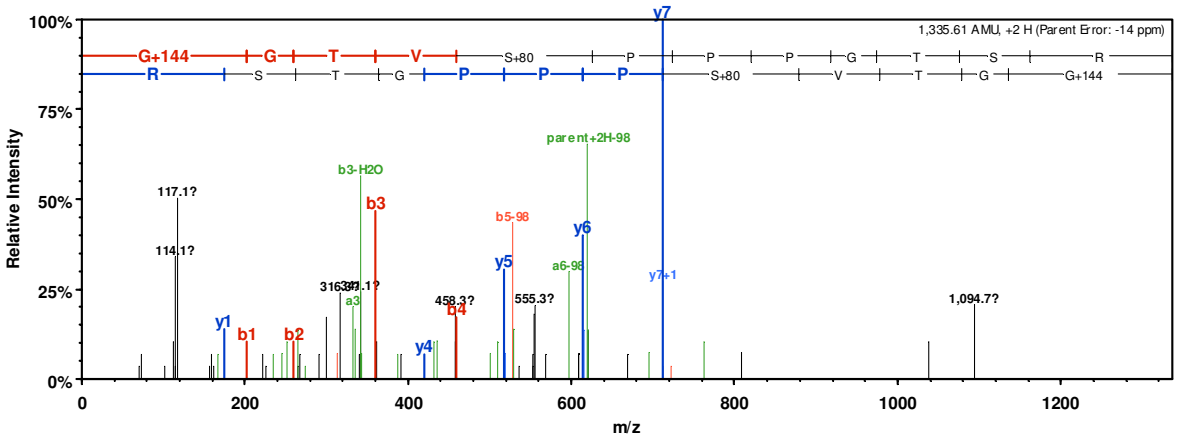
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,433.6	717.3	1,416.6	1,415.6	10
2	357.3				I	1,190.5	595.7	1,173.4	1,172.5	9
3	486.3			468.3	E	1,077.4	539.2	1,060.4	1,059.4	8
4	601.3			583.3	D	948.3	474.7	931.3	930.3	7
5	715.4		698.3	697.4	N	833.3	417.2	816.3	815.3	6
6	844.4	422.7	827.4	826.4	E	719.3		702.2	701.3	5
7	1,087.4	544.2	1,070.4	1,069.4	Y+80	590.2		573.2	572.2	4
8	1,188.5	594.8	1,171.5	1,170.5	T	347.2		330.2	329.2	3
9	1,259.5	630.3	1,242.5	1,241.5	A	246.2		229.1		2
10	1,433.6	717.3	1,416.6	1,415.6	R	175.1		158.1		1

LYN_HUMAN: VIEDNEYpTAR



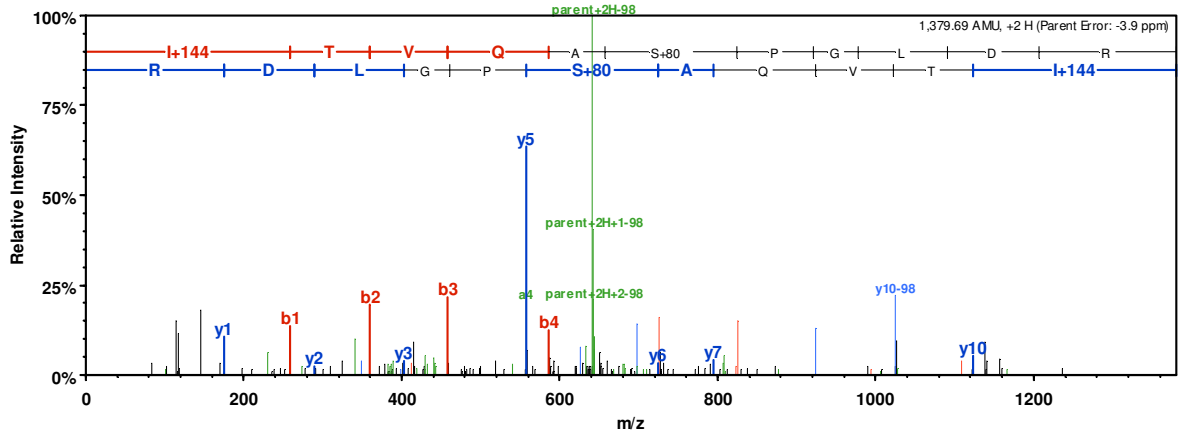
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,433.6	717.3	1,416.6	1,415.6	10
2	357.3				I	1,190.5	595.7	1,173.4	1,172.5	9
3	486.3			468.3	E	1,077.4	539.2	1,060.4	1,059.4	8
4	601.3			583.3	D	948.3	474.7	931.3	930.3	7
5	715.4		698.3	697.4	N	833.3	417.2	816.3	815.3	6
6	844.4	422.7	827.4	826.4	E	719.3		702.2	701.3	5
7	1,007.5	504.2	990.5	989.5	Y	590.2		573.2	572.2	4
8	1,188.5	594.8	1,171.5	1,170.5	T+80	427.2		410.1	409.2	3
9	1,259.5	630.3	1,242.5	1,241.5	A	246.2		229.1		2
10	1,433.6	717.3	1,416.6	1,415.6	R	175.1		158.1		1

M3K11_HUMAN: GGTVpSPPPGTSR



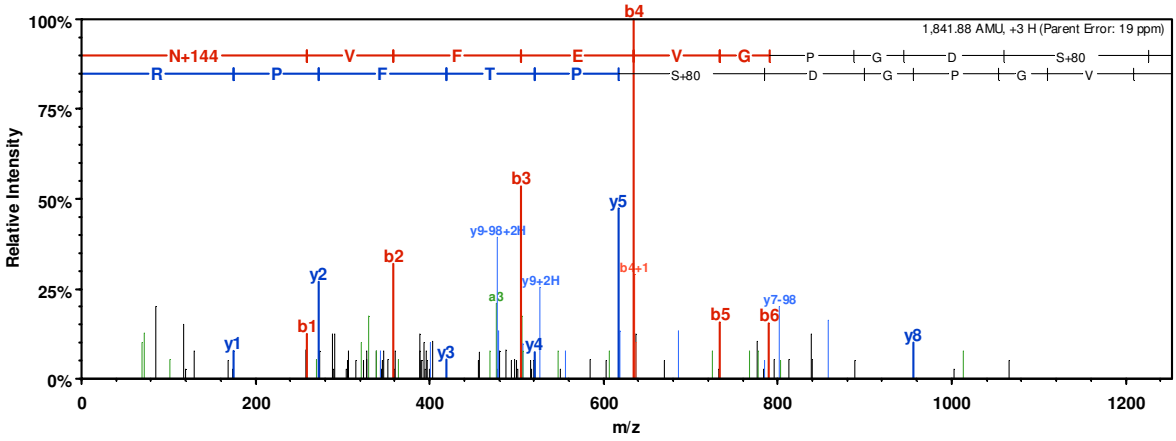
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	202.1				G+144	1,336.6	668.8	1,319.6	1,318.6	12
2	259.2				G	1,135.5	568.3	1,118.5	1,117.5	11
3	360.2			342.2	T	1,078.5	539.8	1,061.5	1,060.5	10
4	459.3			441.3	V	977.4	489.2	960.4	959.4	9
5	626.3			608.3	S+80	878.4	439.7	861.4	860.4	8
6	723.3	362.2		705.3	P	711.4	356.2	694.4	693.4	7
7	820.4	410.7		802.4	P	614.3	307.7	597.3	596.3	6
8	917.4	459.2		899.4	P	517.3		500.2	499.3	5
9	974.4	487.7		956.4	G	420.2		403.2	402.2	4
10	1,075.5	538.3		1,057.5	T	363.2		346.2	345.2	3
11	1,162.5	581.8		1,144.5	S	262.2		245.1	244.1	2
12	1,336.6	668.8	1,319.6	1,318.6	R	175.1		158.1		1

M3K11_HUMAN: ITVQApSPGLDR



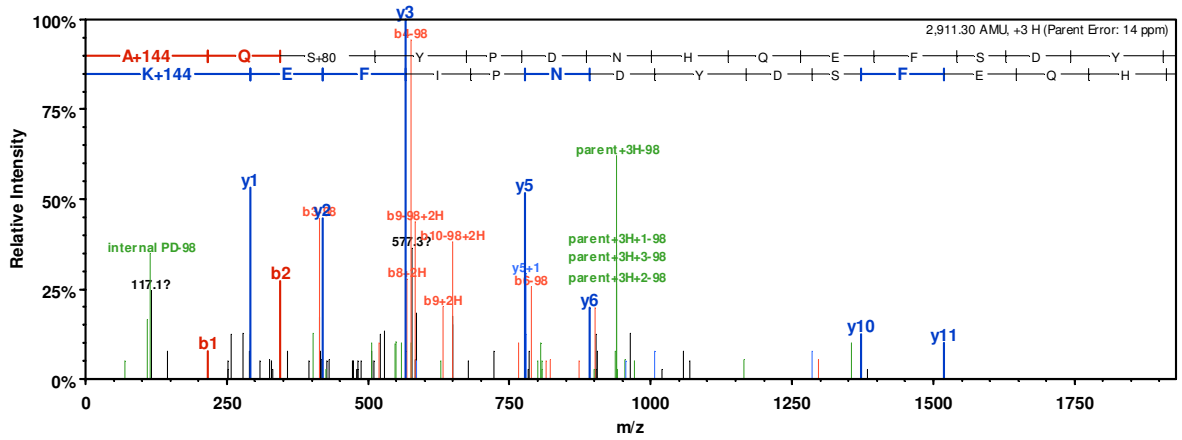
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				I+144	1,380.7	690.9	1,363.7	1,362.7	11
2	359.2			341.2	T	1,123.5	562.3	1,106.5	1,105.5	10
3	458.3			440.3	V	1,022.5	511.7	1,005.4	1,004.5	9
4	586.4		569.3	568.4	Q	923.4	462.2	906.4	905.4	8
5	657.4		640.4	639.4	A	795.3	398.2	778.3	777.3	7
6	824.4	412.7	807.4	806.4	S+80	724.3	362.7	707.3	706.3	6
7	921.5	461.2	904.4	903.4	P	557.3		540.3	539.3	5
8	978.5	489.7	961.5	960.5	G	460.3		443.2	442.2	4
9	1,091.6	546.3	1,074.5	1,073.6	L	403.2		386.2	385.2	3
10	1,206.6	603.8	1,189.6	1,188.6	D	290.1		273.1	272.1	2
11	1,380.7	690.9	1,363.7	1,362.7	R	175.1		158.1		1

M3K11_HUMAN: NVFEVGPGDpSPTFPR



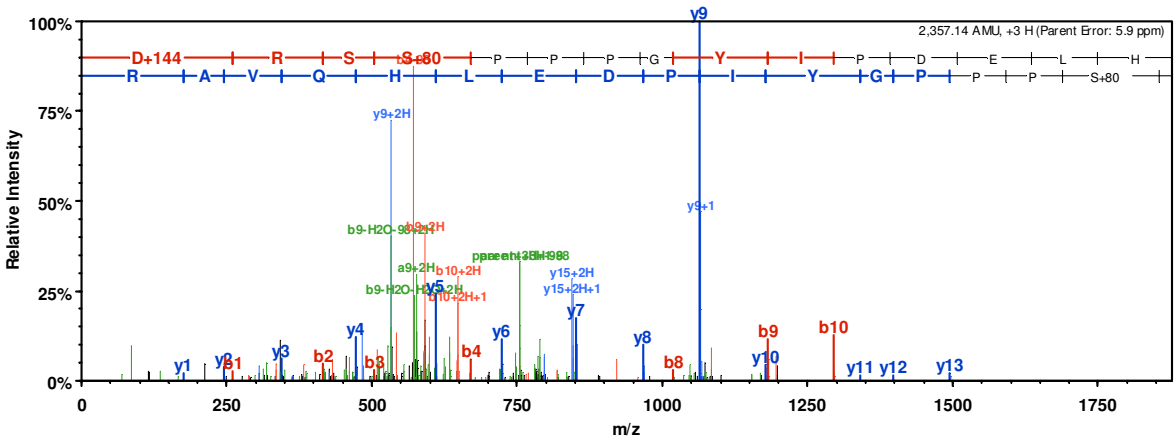
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	259.2		242.1		N+144	1,842.9	921.9	1,825.8	1,824.8	15
2	358.2		341.2		V	1,584.7	792.9	1,567.7	1,566.7	14
3	505.3		488.3		F	1,485.6	743.3	1,468.6	1,467.6	13
4	634.3		617.3	616.3	E	1,338.6	669.8	1,321.5	1,320.6	12
5	733.4		716.4	715.4	V	1,209.5	605.3	1,192.5	1,191.5	11
6	790.4	395.7	773.4	772.4	G	1,110.5	555.7	1,093.4	1,092.5	10
7	887.5	444.2	870.4	869.5	P	1,053.4	527.2	1,036.4	1,035.4	9
8	944.5	472.8	927.5	926.5	G	956.4	478.7	939.4	938.4	8
9	1,059.5	530.3	1,042.5	1,041.5	D	899.4	450.2	882.3	881.4	7
10	1,226.5	613.8	1,209.5	1,208.5	S+80	784.3	392.7	767.3	766.3	6
11	1,323.6	662.3	1,306.5	1,305.6	P	617.3		600.3	599.3	5
12	1,424.6	712.8	1,407.6	1,406.6	T	520.3		503.3	502.3	4
13	1,571.7	786.3	1,554.7	1,553.7	F	419.2		402.2		3
14	1,668.7	834.9	1,651.7	1,650.7	P	272.2		255.1		2
15	1,842.9	921.9	1,825.8	1,824.8	R	175.1		158.1		1

M3K2_HUMAN: AQpSYPDNHQEFSDYDNPIFEK



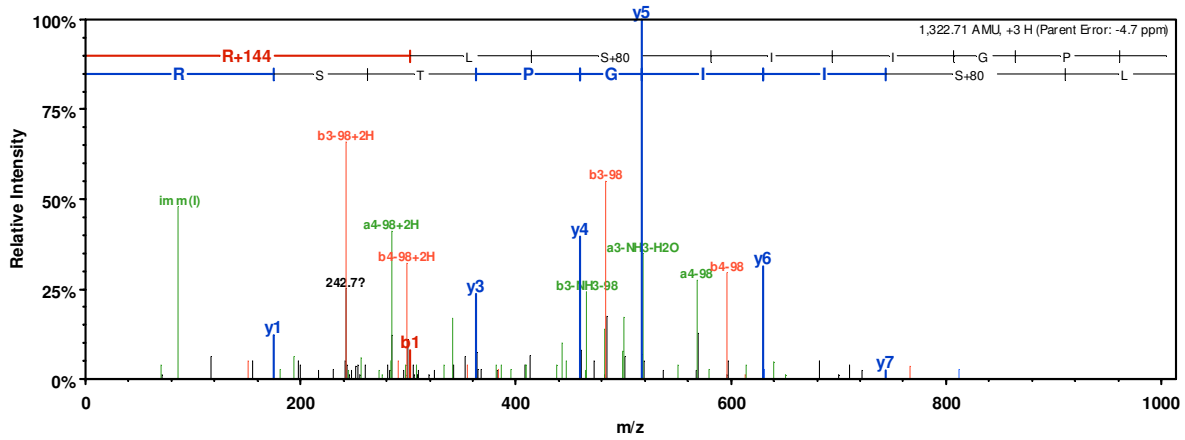
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	216.1				A+144	2,912.3	1,456.6	2,895.2	2,894.3	21
2	344.2		327.2		Q	2,697.1	1,349.1	2,680.1	2,679.1	20
3	511.2		494.2	493.2	S+80	2,569.1	1,285.0	2,552.0	2,551.1	19
4	674.3		657.2	656.3	Y	2,402.1	1,201.5	2,385.0	2,384.1	18
5	771.3		754.3	753.3	P	2,239.0	1,120.0	2,222.0	2,221.0	17
6	886.3	443.7	869.3	868.3	D	2,142.0	1,071.5	2,124.9	2,123.9	16
7	1,000.4	500.7	983.4	982.4	N	2,026.9	1,014.0	2,009.9	2,008.9	15
8	1,137.4	569.2	1,120.4	1,119.4	H	1,912.9	956.9	1,895.9	1,894.9	14
9	1,265.5	633.3	1,248.5	1,247.5	Q	1,775.8	888.4	1,758.8	1,757.8	13
10	1,394.5	697.8	1,377.5	1,376.5	E	1,647.8	824.4	1,630.7	1,629.8	12
11	1,541.6	771.3	1,524.6	1,523.6	F	1,518.7	759.9	1,501.7	1,500.7	11
12	1,628.7	814.8	1,611.6	1,610.6	S	1,371.7	686.3	1,354.6	1,353.6	10
13	1,743.7	872.3	1,726.7	1,725.7	D	1,284.6	642.8	1,267.6	1,266.6	9
14	1,906.7	953.9	1,889.7	1,888.7	Y	1,169.6	585.3	1,152.6	1,151.6	8
15	2,021.8	1,011.4	2,004.7	2,003.8	D	1,006.5	503.8	989.5	988.5	7
16	2,135.8	1,068.4	2,118.8	2,117.8	N	891.5	446.3	874.5	873.5	6
17	2,232.9	1,116.9	2,215.8	2,214.9	P	777.5		760.4	759.5	5
18	2,345.9	1,173.5	2,328.9	2,327.9	I	680.4		663.4	662.4	4
19	2,493.0	1,247.0	2,476.0	2,475.0	F	567.3		550.3	549.3	3
20	2,622.1	1,311.5	2,605.0	2,604.0	E	420.3		403.2	402.2	2
21	2,912.3	1,456.6	2,895.2	2,894.3	K+144	291.2		274.2		1

M3K2_HUMAN: DRSpSPPPGYIPDELHQVAR



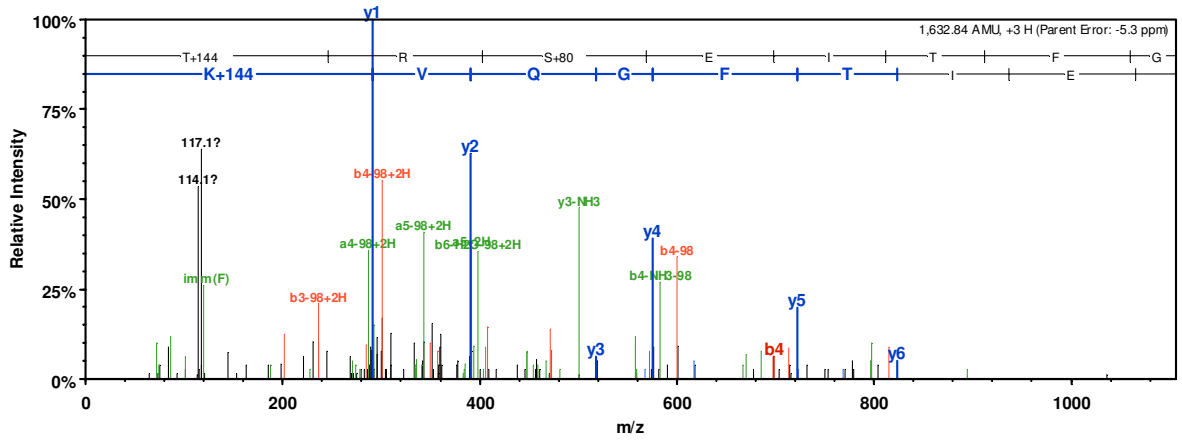
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	260.1			242.1	D+144	2,358.1	1,179.6	2,341.1	2,340.1	19
2	416.2	208.6	399.2	398.2	R	2,099.0	1,050.0	2,082.0	2,081.0	18
3	503.3	252.1	486.2	485.3	S	1,942.9	972.0	1,925.9	1,924.9	17
4	670.3	335.6	653.2	652.3	S+80	1,855.9	928.4	1,838.8	1,837.9	16
5	767.3	384.2	750.3	749.3	P	1,688.9	844.9	1,671.9	1,670.9	15
6	864.4	432.7	847.3	846.4	P	1,591.8	796.4	1,574.8	1,573.8	14
7	961.4	481.2	944.4	943.4	P	1,494.8	747.9	1,477.7	1,476.8	13
8	1,018.4	509.7	1,001.4	1,000.4	G	1,397.7	699.4	1,380.7	1,379.7	12
9	1,181.5	591.3	1,164.5	1,163.5	Y	1,340.7	670.9	1,323.7	1,322.7	11
10	1,294.6	647.8	1,277.6	1,276.6	I	1,177.6	589.3	1,160.6	1,159.6	10
11	1,391.6	696.3	1,374.6	1,373.6	P	1,064.5	532.8	1,047.5	1,046.5	9
12	1,506.7	753.8	1,489.6	1,488.7	D	967.5	484.3	950.5	949.5	8
13	1,635.7	818.4	1,618.7	1,617.7	E	852.5	426.7	835.4	834.5	7
14	1,748.8	874.9	1,731.8	1,730.8	L	723.4	362.2	706.4		6
15	1,885.9	943.4	1,868.8	1,867.9	H	610.3	305.7	593.3		5
16	2,013.9	1,007.5	1,996.9	1,995.9	Q	473.3		456.3		4
17	2,113.0	1,057.0	2,096.0	2,095.0	V	345.2		328.2		3
18	2,184.0	1,092.5	2,167.0	2,166.0	A	246.2		229.1		2
19	2,358.1	1,179.6	2,341.1	2,340.1	R	175.1		158.1		1

M3K2_HUMAN: RLpSIIGPTSR



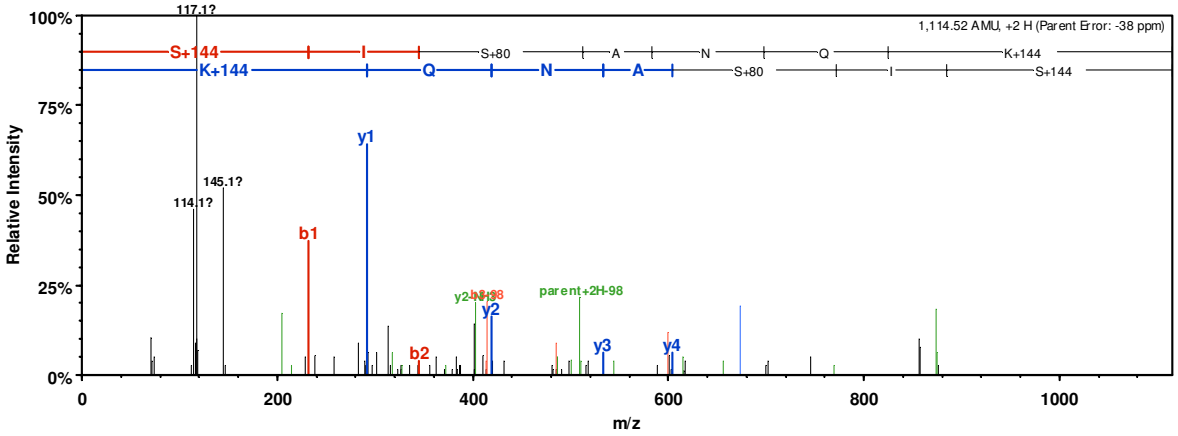
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	301.2	151.1	284.2		R+144	1,323.7	662.4	1,306.7	1,305.7	10
2	414.3	207.7	397.3		L	1,023.5	512.3	1,006.5	1,005.5	9
3	581.3	291.2	564.3	563.3	S+80	910.4	455.7	893.4	892.4	8
4	694.4	347.7	677.4	676.4	I	743.4	372.2	726.4	725.4	7
5	807.5	404.2	790.4	789.5	I	630.4	315.7	613.3	612.3	6
6	864.5	432.7	847.5	846.5	G	517.3		500.2	499.3	5
7	961.5	481.3	944.5	943.5	P	460.3		443.2	442.2	4
8	1,062.6	531.8	1,045.6	1,044.6	T	363.2		346.2	345.2	3
9	1,149.6	575.3	1,132.6	1,131.6	S	262.2		245.1	244.1	2
10	1,323.7	662.4	1,306.7	1,305.7	R	175.1		158.1		1

M4K3_HUMAN: TRpSEITFGQVK



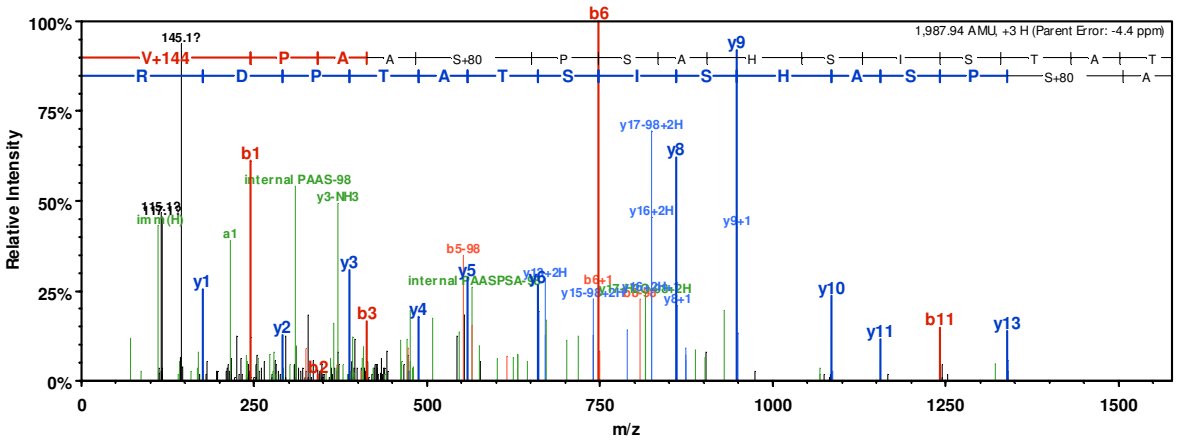
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	246.2			228.1	T+144	1,633.9	817.4	1,616.8	1,615.8	11
2	402.3	201.6	385.2	384.2	R	1,388.7	694.9	1,371.7	1,370.7	10
3	569.3	285.1	552.2	551.2	S+80	1,232.6	616.8	1,215.6	1,214.6	9
4	698.3	349.7	681.3	680.3	E	1,065.6	533.3	1,048.6	1,047.6	8
5	811.4	406.2	794.4	793.4	I	936.6	468.8	919.5	918.6	7
6	912.4	456.7	895.4	894.4	T	823.5	412.2	806.5	805.5	6
7	1,059.5	530.3	1,042.5	1,041.5	F	722.4		705.4		5
8	1,116.5	558.8	1,099.5	1,098.5	G	575.4		558.3		4
9	1,244.6	622.8	1,227.6	1,226.6	Q	518.3		501.3		3
10	1,343.6	672.3	1,326.6	1,325.6	V	390.3		373.3		2
11	1,633.9	817.4	1,616.8	1,615.8	K+144	291.2		274.2		1

MARK1_HUMAN: SIpSANQK



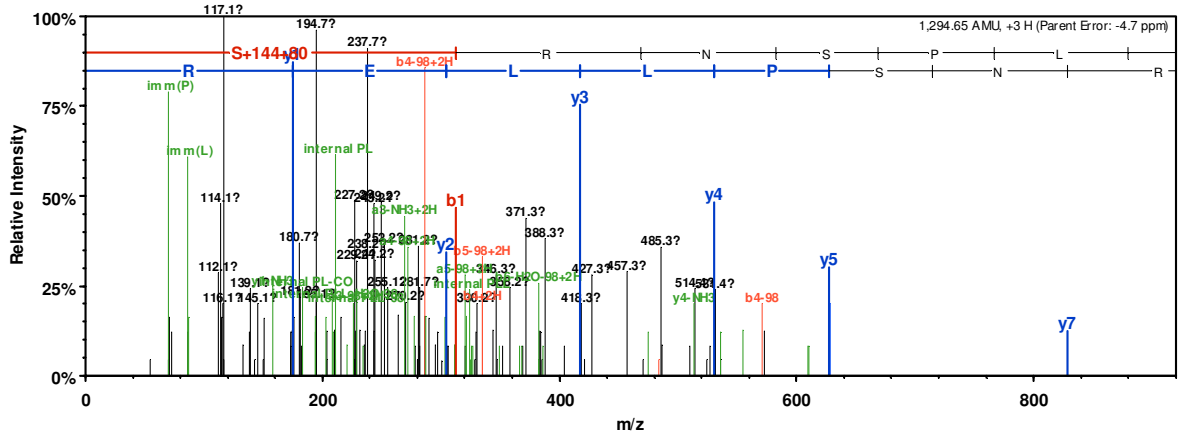
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,115.6	558.3	1,098.5	1,097.6	7
2	345.2			327.2	I	884.4	442.7	867.4	866.4	6
3	512.2			494.2	S+80	771.4		754.3	753.3	5
4	583.3			565.3	A	604.4		587.3		4
5	697.3		680.3	679.3	N	533.3		516.3		3
6	825.4	413.2	808.3	807.4	Q	419.3		402.2		2
7	1,115.6	558.3	1,098.5	1,097.6	K+144	291.2		274.2		1

MARK1_HUMAN: VPAApSPSAHSISTATPDR



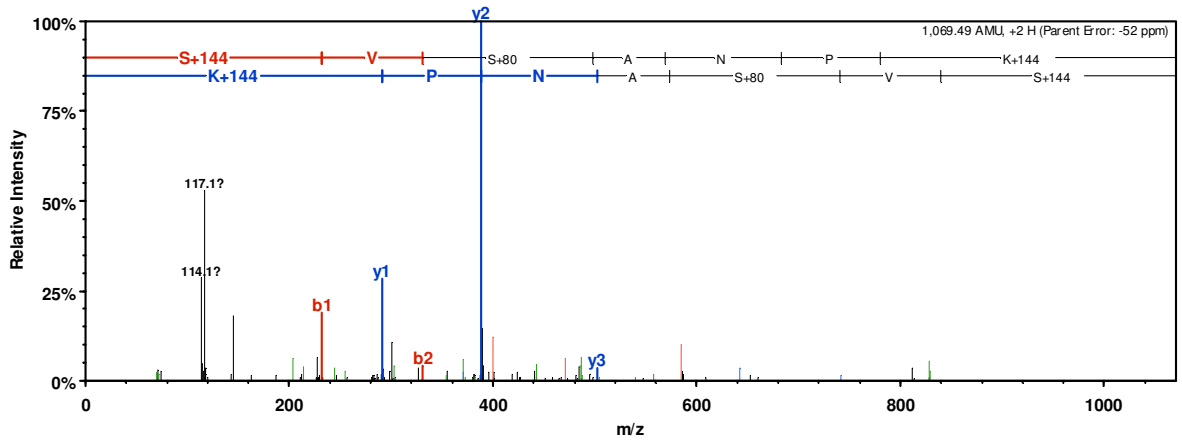
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,989.0	995.0	1,971.9	1,970.9	18
2	341.2				P	1,745.8	873.4	1,728.8	1,727.8	17
3	412.3				A	1,648.7	824.9	1,631.7	1,630.7	16
4	483.3				A	1,577.7	789.4	1,560.7	1,559.7	15
5	650.3			632.3	S+80	1,506.7	753.8	1,489.6	1,488.6	14
6	747.4	374.2		729.3	P	1,339.7	670.3	1,322.6	1,321.7	13
7	834.4	417.7		816.4	S	1,242.6	621.8	1,225.6	1,224.6	12
8	905.4	453.2		887.4	A	1,155.6	578.3	1,138.5	1,137.6	11
9	1,042.5	521.7		1,024.5	H	1,084.5	542.8	1,067.5	1,066.5	10
10	1,129.5	565.3		1,111.5	S	947.5	474.2	930.5	929.5	9
11	1,242.6	621.8		1,224.6	I	860.4	430.7	843.4	842.4	8
12	1,329.6	665.3		1,311.6	S	747.4	374.2	730.3	729.4	7
13	1,430.7	715.8		1,412.7	T	660.3	330.7	643.3	642.3	6
14	1,501.7	751.4		1,483.7	A	559.3		542.3	541.3	5
15	1,602.8	801.9		1,584.8	T	488.2		471.2	470.2	4
16	1,699.8	850.4		1,681.8	P	387.2		370.2	369.2	3
17	1,814.8	907.9		1,796.8	D	290.1		273.1	272.1	2
18	1,989.0	995.0	1,971.9	1,970.9	R	175.1		158.1		1

MARK2_HUMAN: pSRNSPLLER



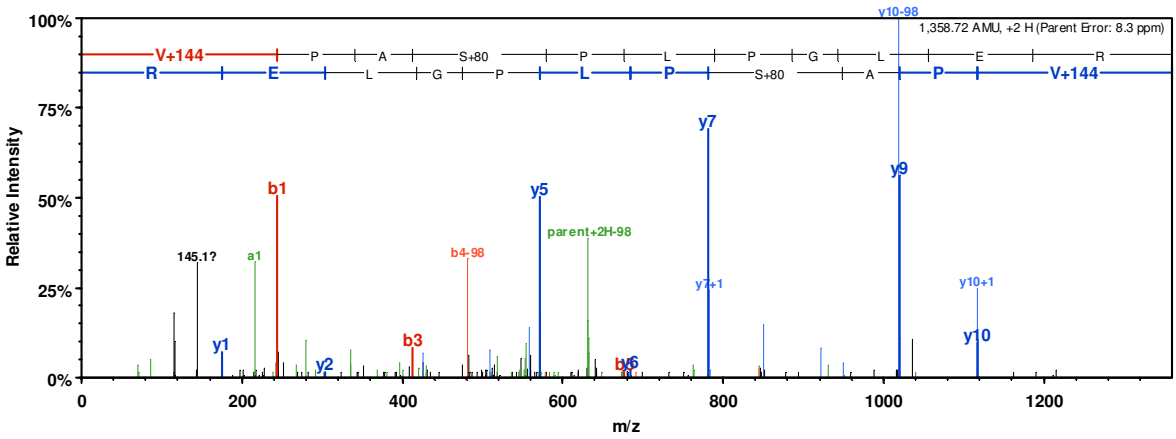
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	312.1			294.1	S+224	1,295.7	648.3	1,278.6	1,277.6	9
2	468.2	234.6	451.2	450.2	R	984.6	492.8	967.5	966.5	8
3	582.3	291.6	565.2	564.2	N	828.5	414.7	811.4	810.4	7
4	669.3	335.1	652.3	651.3	S	714.4	357.7	697.4	696.4	6
5	766.3	383.7	749.3	748.3	P	627.4		610.4	609.4	5
6	879.4	440.2	862.4	861.4	L	530.3		513.3	512.3	4
7	992.5	496.8	975.5	974.5	L	417.2		400.2	399.2	3
8	1,121.5	561.3	1,104.5	1,103.5	E	304.2		287.1	286.2	2
9	1,295.7	648.3	1,278.6	1,277.6	R	175.1		158.1		1

MARK2_HUMAN: SVpSANPK



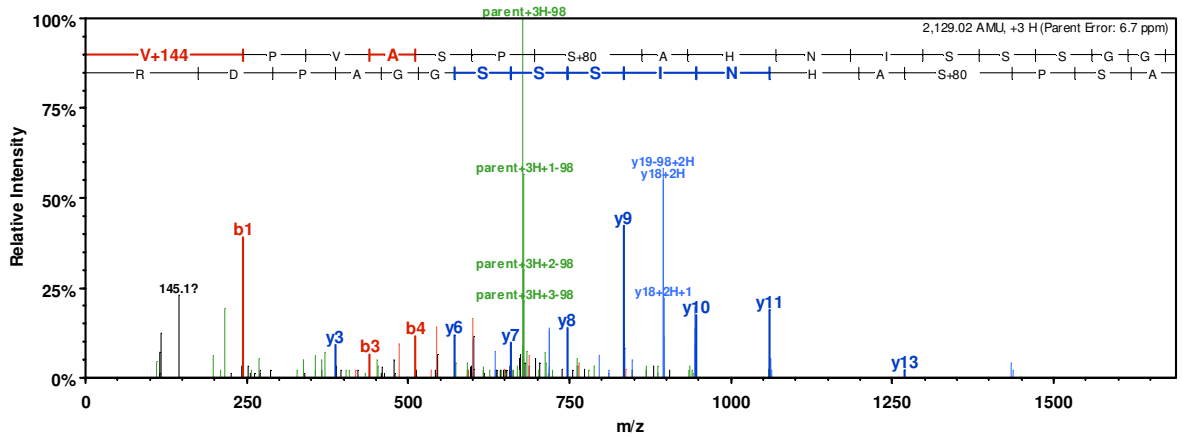
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,070.5	535.8	1,053.5	1,052.5	7
2	331.2			313.2	V	839.4	420.2	822.4	821.4	6
3	498.2			480.2	S+80	740.3		723.3	722.3	5
4	569.2			551.2	A	573.3		556.3		4
5	683.3		666.3	665.3	N	502.3		485.3		3
6	780.3	390.7	763.3	762.3	P	388.3		371.2		2
7	1,070.5	535.8	1,053.5	1,052.5	K+144	291.2		274.2		1

MARK2_HUMAN: VPApSPLPGLER



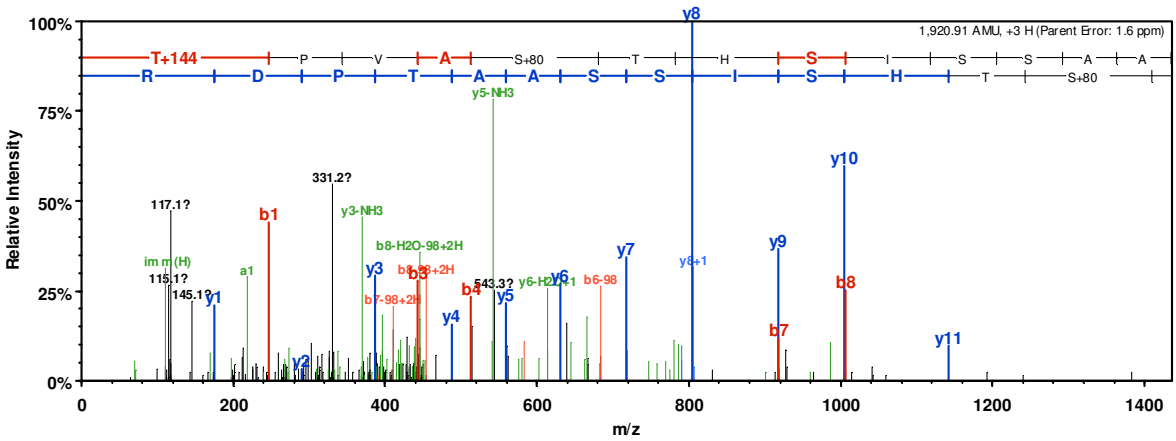
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,359.7	680.4	1,342.7	1,341.7	11
2	341.2				P	1,116.5	558.8	1,099.5	1,098.5	10
3	412.3				A	1,019.5	510.3	1,002.5	1,001.5	9
4	579.3			561.3	S+80	948.5	474.7	931.4	930.4	8
5	676.3			658.3	P	781.5	391.2	764.4	763.4	7
6	789.4	395.2		771.4	L	684.4	342.7	667.4	666.4	6
7	886.5	443.7		868.4	P	571.3		554.3	553.3	5
8	943.5	472.2		925.5	G	474.3		457.2	456.3	4
9	1,056.6	528.8		1,038.6	L	417.2		400.2	399.2	3
10	1,185.6	593.3		1,167.6	E	304.2		287.1	286.2	2
11	1,359.7	680.4	1,342.7	1,341.7	R	175.1		158.1		1

MARK2_HUMAN: VPVASPpSAHNISSSGGAPDR



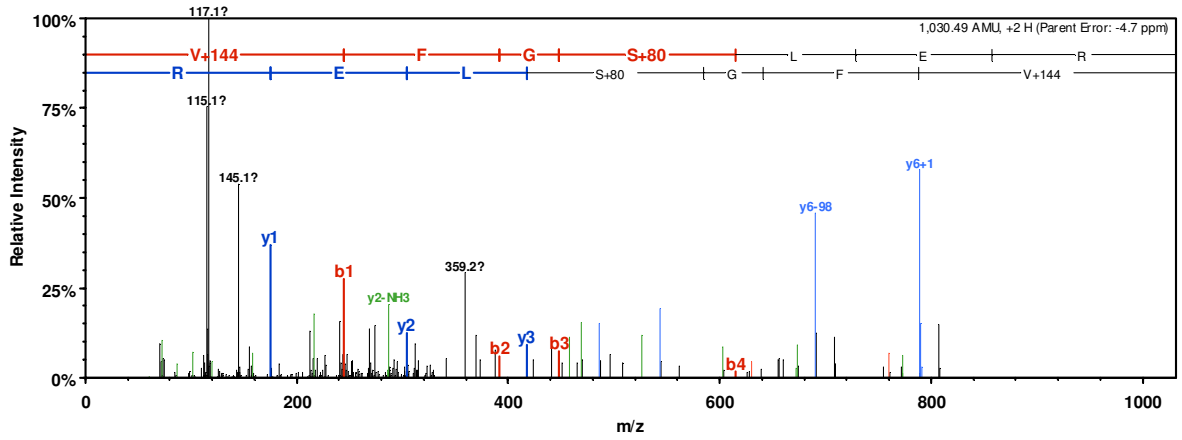
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	2,130.0	1,065.5	2,113.0	2,112.0	20
2	341.2				P	1,886.8	943.9	1,869.8	1,868.8	19
3	440.3				V	1,789.8	895.4	1,772.8	1,771.8	18
4	511.3				A	1,690.7	845.9	1,673.7	1,672.7	17
5	598.4			580.4	S	1,619.7	810.3	1,602.7	1,601.7	16
6	695.4	348.2		677.4	P	1,532.6	766.8	1,515.6	1,514.6	15
7	862.4	431.7		844.4	S+80	1,435.6	718.3	1,418.6	1,417.6	14
8	933.5	467.2		915.4	A	1,268.6	634.8	1,251.6	1,250.6	13
9	1,070.5	535.8		1,052.5	H	1,197.6	599.3	1,180.5	1,179.6	12
10	1,184.6	592.8	1,167.5	1,166.5	N	1,060.5	530.8	1,043.5	1,042.5	11
11	1,297.6	649.3	1,280.6	1,279.6	I	946.5	473.7	929.4	928.4	10
12	1,384.7	692.8	1,367.6	1,366.7	S	833.4	417.2	816.3	815.4	9
13	1,471.7	736.4	1,454.7	1,453.7	S	746.3	373.7	729.3	728.3	8
14	1,558.7	779.9	1,541.7	1,540.7	S	659.3	330.2	642.3	641.3	7
15	1,615.8	808.4	1,598.7	1,597.7	G	572.3	286.6	555.3	554.3	6
16	1,672.8	836.9	1,655.8	1,654.8	G	515.3		498.2	497.2	5
17	1,743.8	872.4	1,726.8	1,725.8	A	458.2		441.2	440.2	4
18	1,840.9	920.9	1,823.8	1,822.9	P	387.2		370.2	369.2	3
19	1,955.9	978.5	1,938.9	1,937.9	D	290.1		273.1	272.1	2
20	2,130.0	1,065.5	2,113.0	2,112.0	R	175.1		158.1		1

MARK3_HUMAN: TPVApSTHSISSAATPDR



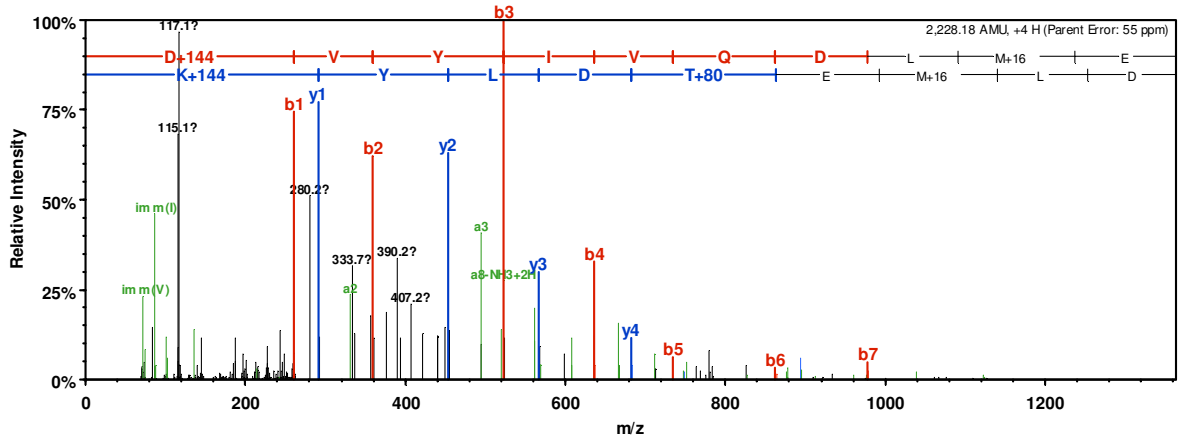
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	246.2			228.1	T+144	1,921.9	961.5	1,904.9	1,903.9	17
2	343.2			325.2	P	1,676.8	838.9	1,659.7	1,658.8	16
3	442.3			424.3	V	1,579.7	790.4	1,562.7	1,561.7	15
4	513.3			495.3	A	1,480.6	740.8	1,463.6	1,462.6	14
5	680.3			662.3	S+80	1,409.6	705.3	1,392.6	1,391.6	13
6	781.4	391.2		763.4	T	1,242.6	621.8	1,225.6	1,224.6	12
7	918.4	459.7		900.4	H	1,141.6	571.3	1,124.5	1,123.5	11
8	1,005.5	503.2		987.4	S	1,004.5	502.8	987.5	986.5	10
9	1,118.5	559.8		1,100.5	I	917.5	459.2	900.4	899.5	9
10	1,205.6	603.3		1,187.6	S	804.4	402.7	787.4	786.4	8
11	1,292.6	646.8		1,274.6	S	717.4	359.2	700.3	699.3	7
12	1,363.6	682.3		1,345.6	A	630.3	315.7	613.3	612.3	6
13	1,434.7	717.8		1,416.7	A	559.3		542.3	541.3	5
14	1,535.7	768.4		1,517.7	T	488.2		471.2	470.2	4
15	1,632.8	816.9		1,614.8	P	387.2		370.2	369.2	3
16	1,747.8	874.4		1,729.8	D	290.1		273.1	272.1	2
17	1,921.9	961.5	1,904.9	1,903.9	R	175.1		158.1		1

MELK_HUMAN: VFGpSLER



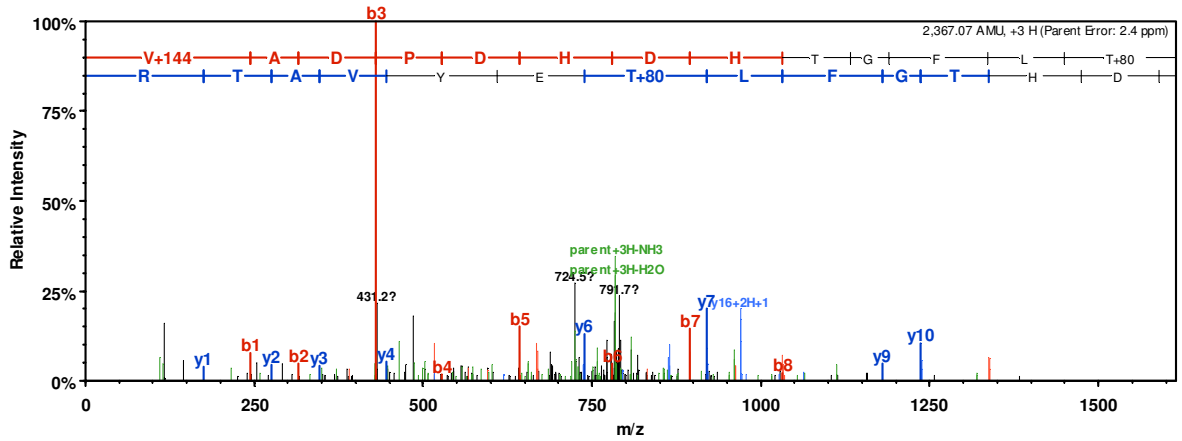
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,031.5	516.3	1,014.5	1,013.5	7
2	391.2				F	788.3	394.7	771.3	770.3	6
3	448.3				G	641.3		624.2	623.3	5
4	615.3			597.3	S+80	584.2		567.2	566.2	4
5	728.4			710.3	L	417.2		400.2	399.2	3
6	857.4	429.2		839.4	E	304.2		287.1	286.2	2
7	1,031.5	516.3	1,014.5	1,013.5	R	175.1		158.1		1

MK01_HUMAN: DVYIVQDLMEpTDLYK



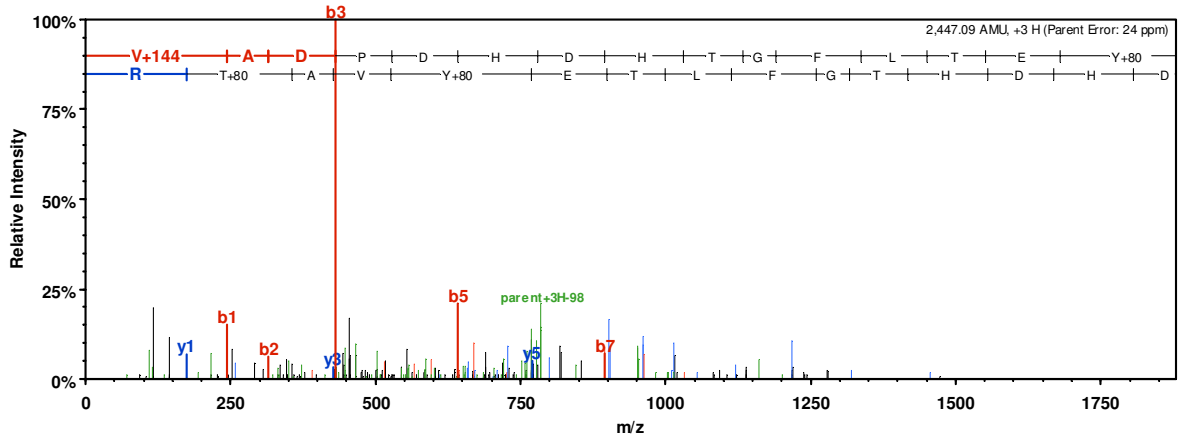
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	260.1			242.1	D+144	2,229.1	1,115.0	2,212.0	2,211.1	15
2	359.2			341.2	V	1,969.9	985.5	1,952.9	1,951.9	14
3	522.3			504.3	Y	1,870.9	935.9	1,853.8	1,852.9	13
4	635.4			617.3	I	1,707.8	854.4	1,690.8	1,689.8	12
5	734.4			716.4	V	1,594.7	797.9	1,577.7	1,576.7	11
6	862.5	431.7	845.5	844.5	Q	1,495.7	748.3	1,478.6	1,477.6	10
7	977.5	489.3	960.5	959.5	D	1,367.6	684.3	1,350.6	1,349.6	9
8	1,090.6	545.8	1,073.6	1,072.6	L	1,252.6	626.8	1,235.5	1,234.6	8
9	1,237.6	619.3	1,220.6	1,219.6	M+16	1,139.5	570.2	1,122.5	1,121.5	7
10	1,366.7	683.8	1,349.6	1,348.7	E	992.4	496.7	975.4	974.4	6
11	1,547.7	774.3	1,530.7	1,529.7	T+80	863.4		846.4	845.4	5
12	1,662.7	831.9	1,645.7	1,644.7	D	682.4		665.4	664.4	4
13	1,775.8	888.4	1,758.8	1,757.8	L	567.4		550.3		3
14	1,938.9	969.9	1,921.8	1,920.8	Y	454.3		437.3		2
15	2,229.1	1,115.0	2,212.0	2,211.1	K+144	291.2		274.2		1

MK01_HUMAN: VADPDHDHTGFLpTEYVATR



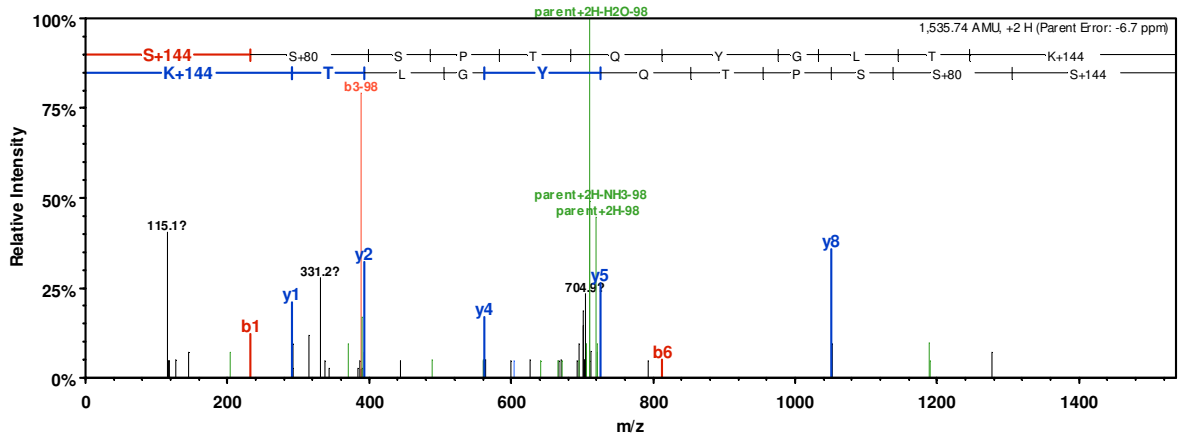
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	2,368.1	1,184.5	2,351.0	2,350.1	19
2	315.2				A	2,124.9	1,063.0	2,107.9	2,106.9	18
3	430.2			412.2	D	2,053.9	1,027.4	2,036.8	2,035.9	17
4	527.3			509.3	P	1,938.8	969.9	1,921.8	1,920.8	16
5	642.3			624.3	D	1,841.8	921.4	1,824.8	1,823.8	15
6	779.4	390.2		761.4	H	1,726.8	863.9	1,709.7	1,708.7	14
7	894.4	447.7		876.4	D	1,589.7	795.4	1,572.7	1,571.7	13
8	1,031.5	516.2		1,013.5	H	1,474.7	737.8	1,457.6	1,456.7	12
9	1,132.5	566.8		1,114.5	T	1,337.6	669.3	1,320.6	1,319.6	11
10	1,189.5	595.3		1,171.5	G	1,236.6	618.8	1,219.5	1,218.6	10
11	1,336.6	668.8		1,318.6	F	1,179.5	590.3	1,162.5	1,161.5	9
12	1,449.7	725.3		1,431.7	L	1,032.5	516.7	1,015.5	1,014.5	8
13	1,630.7	815.9		1,612.7	T+80	919.4	460.2	902.4	901.4	7
14	1,759.7	880.4		1,741.7	E	738.4	369.7	721.4	720.4	6
15	1,922.8	961.9		1,904.8	Y	609.3		592.3	591.3	5
16	2,021.9	1,011.4		2,003.9	V	446.3		429.2	428.3	4
17	2,092.9	1,047.0		2,074.9	A	347.2		330.2	329.2	3
18	2,194.0	1,097.5		2,176.0	T	276.2		259.1	258.2	2
19	2,368.1	1,184.5	2,351.0	2,350.1	R	175.1		158.1		1

MK01_HUMAN: VADPDHDHTGFLTEpYVApTR



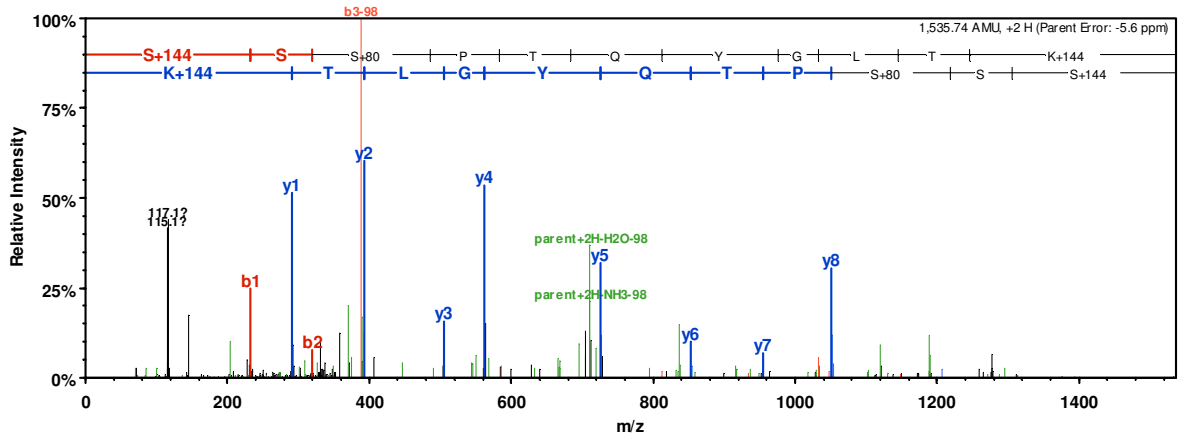
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	2,448.0	1,224.5	2,431.0	2,430.0	19
2	315.2				A	2,204.9	1,102.9	2,187.8	2,186.9	18
3	430.2			412.2	D	2,133.8	1,067.4	2,116.8	2,115.8	17
4	527.3			509.3	P	2,018.8	1,009.9	2,001.8	2,000.8	16
5	642.3			624.3	D	1,921.8	961.4	1,904.7	1,903.7	15
6	779.4	390.2		761.4	H	1,806.7	903.9	1,789.7	1,788.7	14
7	894.4	447.7		876.4	D	1,669.7	835.3	1,652.6	1,651.7	13
8	1,031.5	516.2		1,013.5	H	1,554.6	777.8	1,537.6	1,536.6	12
9	1,132.5	566.8		1,114.5	T	1,417.6	709.3	1,400.6	1,399.6	11
10	1,189.5	595.3		1,171.5	G	1,316.5	658.8	1,299.5	1,298.5	10
11	1,336.6	668.8		1,318.6	F	1,259.5	630.3	1,242.5	1,241.5	9
12	1,449.7	725.3		1,431.7	L	1,112.4	556.7	1,095.4	1,094.4	8
13	1,550.7	775.9		1,532.7	T	999.4	500.2	982.3	981.3	7
14	1,679.8	840.4		1,661.8	E	898.3	449.7	881.3	880.3	6
15	1,922.8	961.9		1,904.8	Y+80	769.3		752.2	751.3	5
16	2,021.9	1,011.4		2,003.9	V	526.2		509.2	508.2	4
17	2,092.9	1,047.0		2,074.9	A	427.2		410.1	409.2	3
18	2,273.9	1,137.5		2,255.9	T+80	356.1		339.1	338.1	2
19	2,448.0	1,224.5	2,431.0	2,430.0	R	175.1		158.1		1

MLTK_HUMAN: SpSSPTQYGLTK



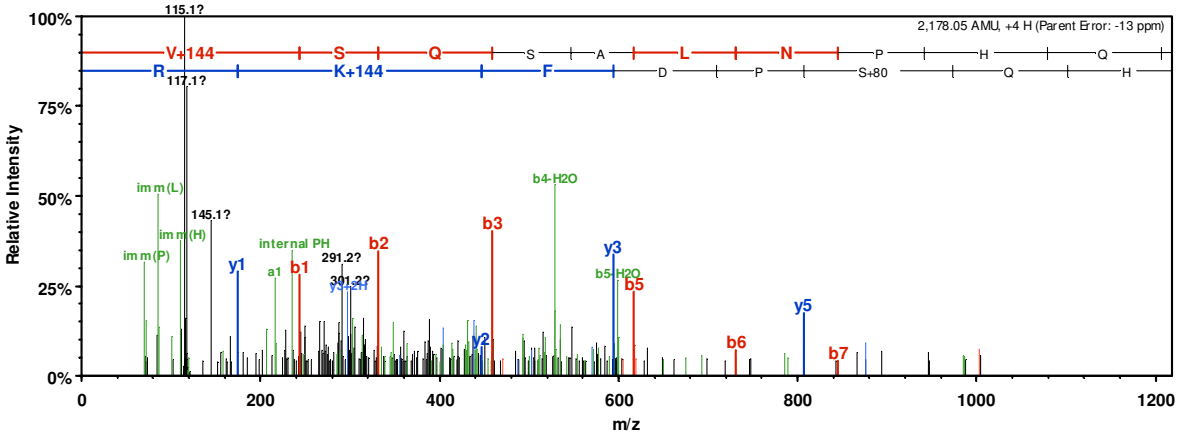
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,536.8	768.9	1,519.7	1,518.7	11
2	399.1			381.1	S+80	1,305.6	653.3	1,288.6	1,287.6	10
3	486.2			468.2	S	1,138.6	569.8	1,121.6	1,120.6	9
4	583.2			565.2	P	1,051.6	526.3	1,034.6	1,033.6	8
5	684.3			666.3	T	954.5	477.8	937.5	936.5	7
6	812.3	406.7	795.3	794.3	Q	853.5	427.2	836.5	835.5	6
7	975.4	488.2	958.4	957.4	Y	725.4		708.4	707.4	5
8	1,032.4	516.7	1,015.4	1,014.4	G	562.4		545.3	544.4	4
9	1,145.5	573.3	1,128.5	1,127.5	L	505.3		488.3	487.3	3
10	1,246.5	623.8	1,229.5	1,228.5	T	392.3		375.2	374.3	2
11	1,536.8	768.9	1,519.7	1,518.7	K+144	291.2		274.2		1

MLTK_HUMAN: SSpSPTQYGLTK



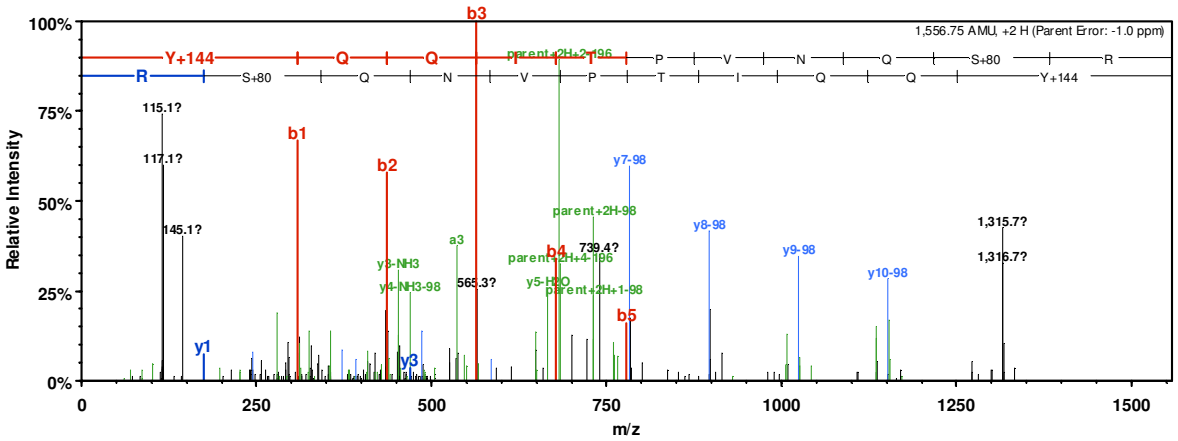
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,536.8	768.9	1,519.7	1,518.7	11
2	319.2			301.2	S	1,305.6	653.3	1,288.6	1,287.6	10
3	486.2			468.2	S+80	1,218.6	609.8	1,201.6	1,200.6	9
4	583.2			565.2	P	1,051.6	526.3	1,034.6	1,033.6	8
5	684.3			666.3	T	954.5	477.8	937.5	936.5	7
6	812.3	406.7	795.3	794.3	Q	853.5	427.2	836.5	835.5	6
7	975.4	488.2	958.4	957.4	Y	725.4		708.4	707.4	5
8	1,032.4	516.7	1,015.4	1,014.4	G	562.4		545.3	544.4	4
9	1,145.5	573.3	1,128.5	1,127.5	L	505.3		488.3	487.3	3
10	1,246.5	623.8	1,229.5	1,228.5	T	392.3		375.2	374.3	2
11	1,536.8	768.9	1,519.7	1,518.7	K+144	291.2		274.2		1

MLTK_HUMAN: VSQSALNPHQpSPDFKR



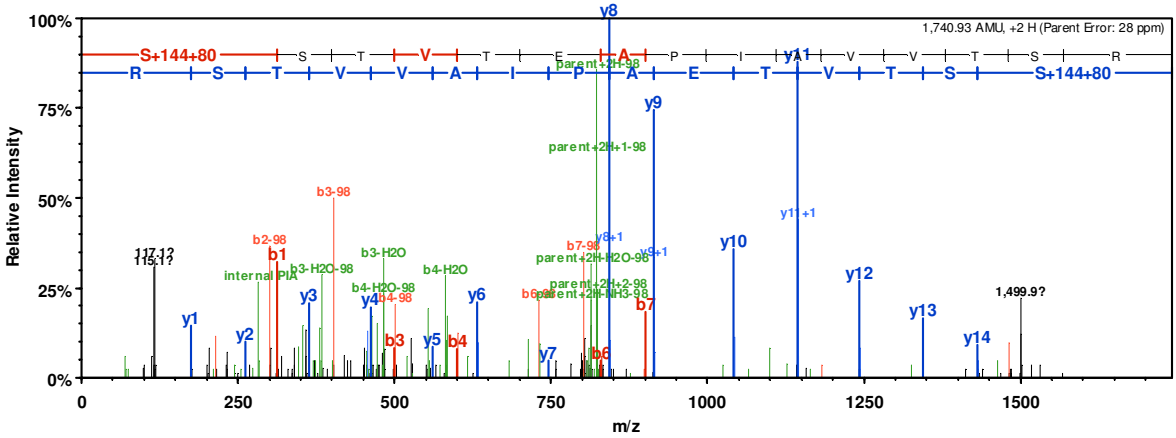
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	2,179.1	1,090.0	2,162.1	2,161.1	16
2	331.2			313.2	S	1,935.9	968.5	1,918.9	1,917.9	15
3	459.3		442.2	441.3	Q	1,848.9	924.9	1,831.9	1,830.9	14
4	546.3		529.3	528.3	S	1,720.8	860.9	1,703.8	1,702.8	13
5	617.3		600.3	599.3	A	1,633.8	817.4	1,616.8	1,615.8	12
6	730.4	365.7	713.4	712.4	L	1,562.8	781.9	1,545.7	1,544.7	11
7	844.5	422.7	827.4	826.5	N	1,449.7	725.3	1,432.6	1,431.7	10
8	941.5	471.3	924.5	923.5	P	1,335.6	668.3	1,318.6	1,317.6	9
9	1,078.6	539.8	1,061.6	1,060.6	H	1,238.6	619.8	1,221.6	1,220.6	8
10	1,206.6	603.8	1,189.6	1,188.6	Q	1,101.5	551.3	1,084.5	1,083.5	7
11	1,373.6	687.3	1,356.6	1,355.6	S+80	973.5	487.2	956.4	955.5	6
12	1,470.7	735.8	1,453.7	1,452.7	P	806.5	403.7	789.4	788.5	5
13	1,585.7	793.4	1,568.7	1,567.7	D	709.4	355.2	692.4	691.4	4
14	1,732.8	866.9	1,715.8	1,714.8	F	594.4	297.7	577.4		3
15	2,005.0	1,003.0	1,988.0	1,987.0	K+144	447.3	224.2	430.3		2
16	2,179.1	1,090.0	2,162.1	2,161.1	R	175.1		158.1		1

MLTK_HUMAN: YQQITPVNQpSR



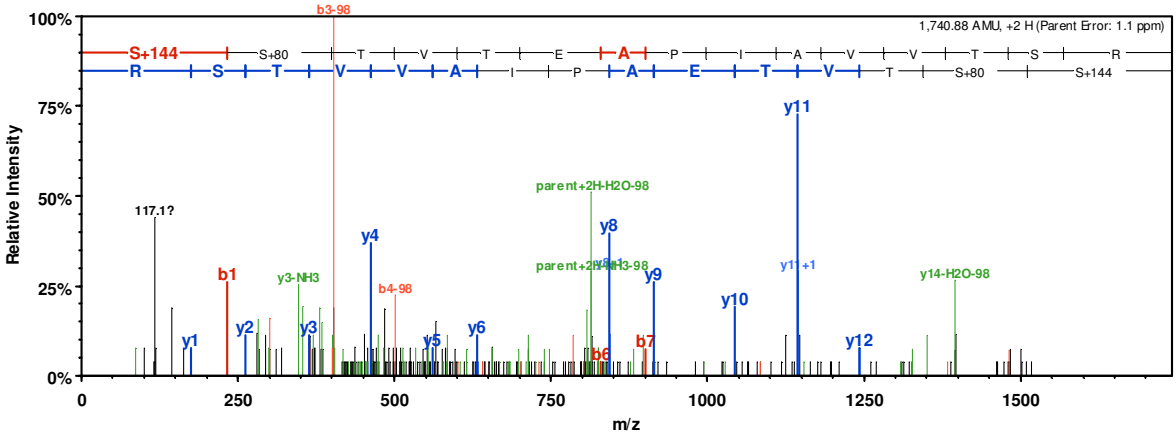
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	308.2				Y+144	1,557.8	779.4	1,540.7	1,539.7	11
2	436.2		419.2		Q	1,250.6	625.8	1,233.6	1,232.6	10
3	564.3		547.3		Q	1,122.5	561.8	1,105.5	1,104.5	9
4	677.4		660.3		I	994.5	497.7	977.4	976.5	8
5	778.4		761.4	760.4	T	881.4	441.2	864.4	863.4	7
6	875.5	438.2	858.4	857.5	P	780.3	390.7	763.3	762.3	6
7	974.5	487.8	957.5	956.5	V	683.3		666.3	665.3	5
8	1,088.6	544.8	1,071.6	1,070.6	N	584.2		567.2	566.2	4
9	1,216.6	608.8	1,199.6	1,198.6	Q	470.2		453.1	452.2	3
10	1,383.6	692.3	1,366.6	1,365.6	S+80	342.1		325.1	324.1	2
11	1,557.8	779.4	1,540.7	1,539.7	R	175.1		158.1		1

NEK9_HUMAN: pSSTVTEAPIAVVTSR



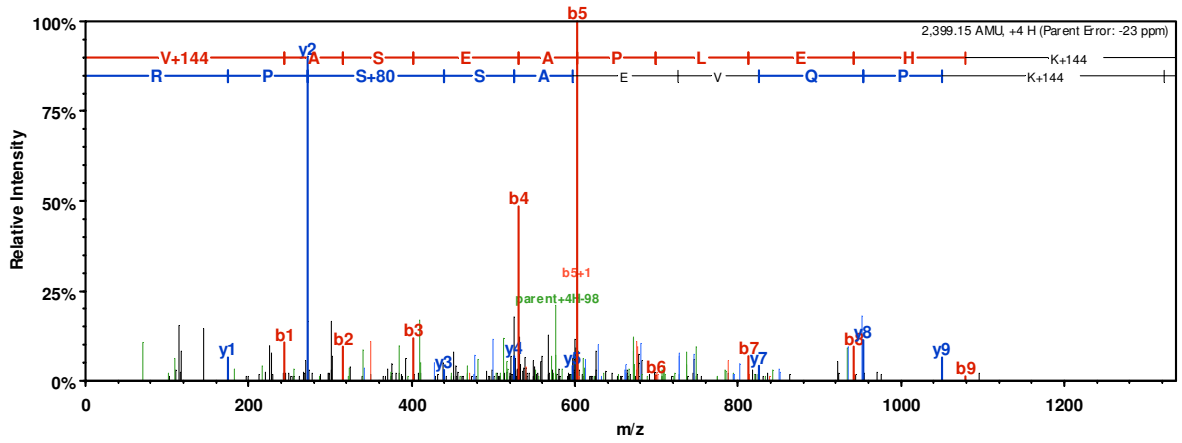
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	312.1			294.1	S+224	1,741.9	871.4	1,724.9	1,723.9	15
2	399.1			381.1	S	1,430.8	715.9	1,413.8	1,412.8	14
3	500.2			482.2	T	1,343.8	672.4	1,326.7	1,325.7	13
4	599.3			581.2	V	1,242.7	621.9	1,225.7	1,224.7	12
5	700.3			682.3	T	1,143.6	572.3	1,126.6	1,125.6	11
6	829.3	415.2		811.3	E	1,042.6	521.8	1,025.6	1,024.6	10
7	900.4	450.7		882.4	A	913.5	457.3	896.5	895.5	9
8	997.4	499.2		979.4	P	842.5	421.8	825.5	824.5	8
9	1,110.5	555.8		1,092.5	I	745.5	373.2	728.4	727.4	7
10	1,181.6	591.3		1,163.5	A	632.4	316.7	615.3	614.4	6
11	1,280.6	640.8		1,262.6	V	561.3		544.3	543.3	5
12	1,379.7	690.4		1,361.7	V	462.3		445.2	444.3	4
13	1,480.7	740.9		1,462.7	T	363.2		346.2	345.2	3
14	1,567.8	784.4		1,549.8	S	262.2		245.1	244.1	2
15	1,741.9	871.4	1,724.9	1,723.9	R	175.1		158.1		1

NEK9_HUMAN: SpSTVTEAPIAVVTSR



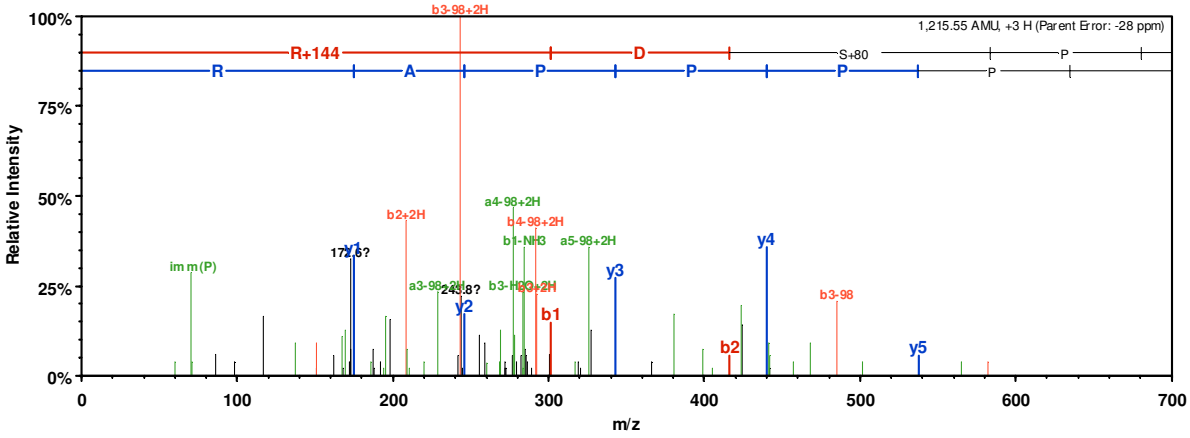
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	232.1			214.1	S+144	1,741.9	871.4	1,724.9	1,723.9	15
2	399.1			381.1	S+80	1,510.8	755.9	1,493.7	1,492.7	14
3	500.2			482.2	T	1,343.8	672.4	1,326.7	1,325.7	13
4	599.3			581.2	V	1,242.7	621.9	1,225.7	1,224.7	12
5	700.3			682.3	T	1,143.6	572.3	1,126.6	1,125.6	11
6	829.3	415.2		811.3	E	1,042.6	521.8	1,025.6	1,024.6	10
7	900.4	450.7		882.4	A	913.5	457.3	896.5	895.5	9
8	997.4	499.2		979.4	P	842.5	421.8	825.5	824.5	8
9	1,110.5	555.8		1,092.5	I	745.5	373.2	728.4	727.4	7
10	1,181.6	591.3		1,163.5	A	632.4	316.7	615.3	614.4	6
11	1,280.6	640.8		1,262.6	V	561.3		544.3	543.3	5
12	1,379.7	690.4		1,361.7	V	462.3		445.2	444.3	4
13	1,480.7	740.9		1,462.7	T	363.2		346.2	345.2	3
14	1,567.8	784.4		1,549.8	S	262.2		245.1	244.1	2
15	1,741.9	871.4	1,724.9	1,723.9	R	175.1		158.1		1

NEK9_HUMAN: VASEAPLEHKPQVEASpSPR



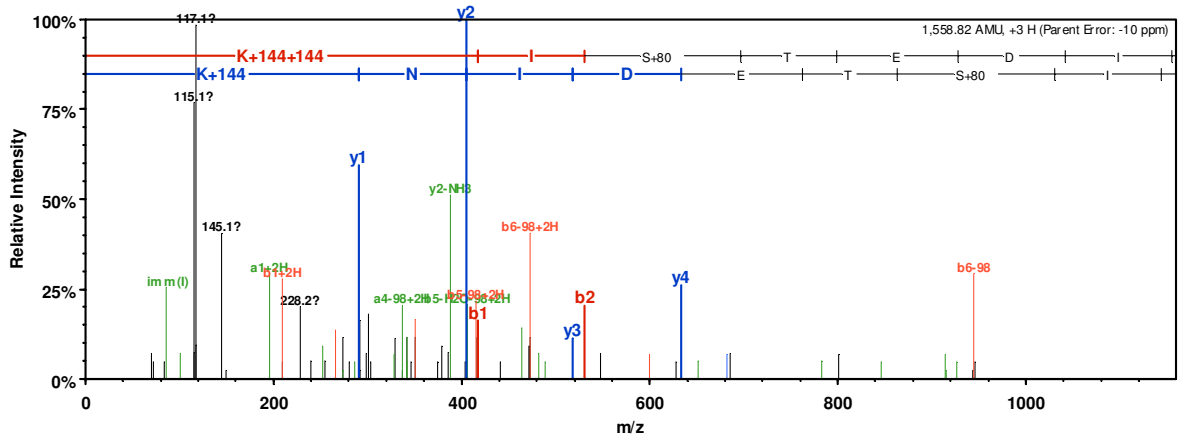
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	2,400.2	1,200.6	2,383.2	2,382.2	19
2	315.2				A	2,157.0	1,079.0	2,140.0	2,139.0	18
3	402.2			384.2	S	2,086.0	1,043.5	2,069.0	2,068.0	17
4	531.3			513.3	E	1,999.0	1,000.0	1,982.0	1,981.0	16
5	602.3			584.3	A	1,869.9	935.5	1,852.9	1,851.9	15
6	699.4	350.2		681.4	P	1,798.9	900.0	1,781.9	1,780.9	14
7	812.5	406.7		794.5	L	1,701.8	851.4	1,684.8	1,683.8	13
8	941.5	471.3		923.5	E	1,588.8	794.9	1,571.7	1,570.8	12
9	1,078.6	539.8		1,060.6	H	1,459.7	730.4	1,442.7	1,441.7	11
10	1,350.8	675.9	1,333.7	1,332.8	K+144	1,322.7	661.8	1,305.6	1,304.6	10
11	1,447.8	724.4	1,430.8	1,429.8	P	1,050.5	525.7	1,033.4	1,032.5	9
12	1,575.9	788.4	1,558.8	1,557.9	Q	953.4	477.2	936.4	935.4	8
13	1,674.9	838.0	1,657.9	1,656.9	V	825.4	413.2	808.3	807.3	7
14	1,804.0	902.5	1,787.0	1,786.0	E	726.3	363.6	709.3	708.3	6
15	1,875.0	938.0	1,858.0	1,857.0	A	597.2		580.2	579.2	5
16	1,962.1	981.5	1,945.0	1,944.0	S	526.2		509.2	508.2	4
17	2,129.1	1,065.0	2,112.0	2,111.0	S+80	439.2		422.1	421.2	3
18	2,226.1	1,113.6	2,209.1	2,208.1	P	272.2		255.1		2
19	2,400.2	1,200.6	2,383.2	2,382.2	R	175.1		158.1		1

PAK4_HUMAN: RDpSPPPPAR



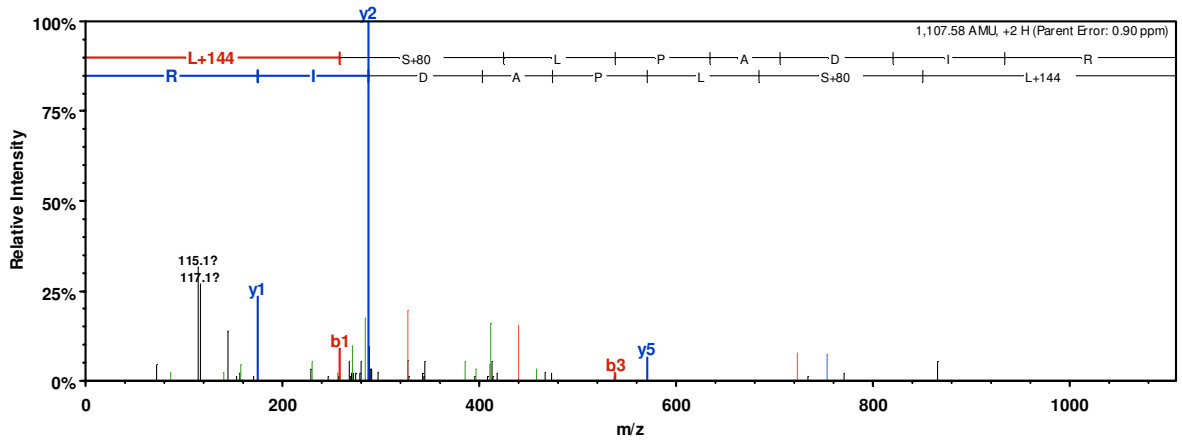
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	301.2	151.1	284.2		R+144	1,216.6	608.8	1,199.6	1,198.6	9
2	416.2	208.6	399.2	398.2	D	916.4	458.7	899.4	898.4	8
3	583.2	292.1	566.2	565.2	S+80	801.4	401.2	784.3	783.4	7
4	680.3	340.6	663.3	662.3	P	634.4	317.7	617.3		6
5	777.3	389.2	760.3	759.3	P	537.3		520.3		5
6	874.4	437.7	857.4	856.4	P	440.3		423.2		4
7	971.4	486.2	954.4	953.4	P	343.2		326.2		3
8	1,042.5	521.7	1,025.5	1,024.5	A	246.2		229.1		2
9	1,216.6	608.8	1,199.6	1,198.6	R	175.1		158.1		1

PCTK1_HUMAN: KIpSTEDINK



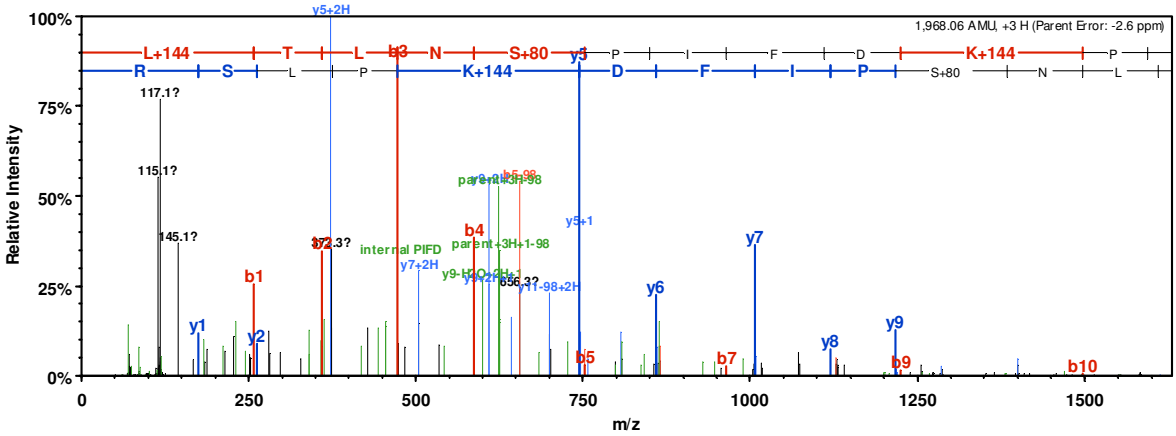
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	417.3	209.2	400.3		K+288	1,559.8	780.4	1,542.8	1,541.8	9
2	530.4	265.7	513.4		I	1,143.5	572.3	1,126.5	1,125.5	8
3	697.4	349.2	680.4	679.4	S+80	1,030.5	515.7	1,013.4	1,012.4	7
4	798.4	399.7	781.4	780.4	T	863.5	432.2	846.4	845.4	6
5	927.5	464.2	910.5	909.5	E	762.4		745.4	744.4	5
6	1,042.5	521.8	1,025.5	1,024.5	D	633.4		616.3	615.4	4
7	1,155.6	578.3	1,138.6	1,137.6	I	518.3		501.3		3
8	1,269.6	635.3	1,252.6	1,251.6	N	405.3		388.2		2
9	1,559.8	780.4	1,542.8	1,541.8	K+144	291.2		274.2		1

PCTK1_HUMAN: LpSLPADIR



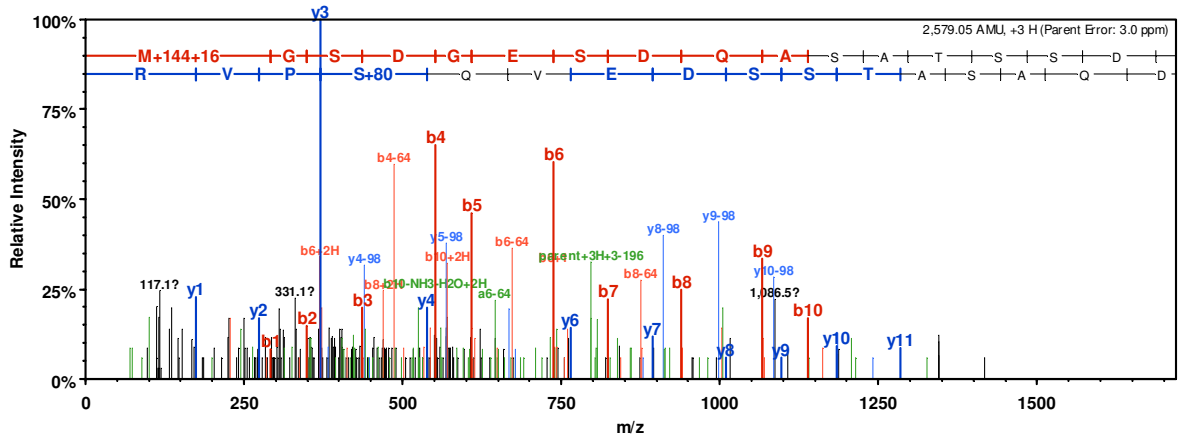
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				L+144	1,108.6	554.8	1,091.6	1,090.6	8
2	425.2			407.2	S+80	851.4	426.2	834.4	833.4	7
3	538.3			520.3	L	684.4	342.7	667.4	666.4	6
4	635.3			617.3	P	571.3		554.3	553.3	5
5	706.4			688.4	A	474.3		457.2	456.3	4
6	821.4	411.2		803.4	D	403.2		386.2	385.2	3
7	934.5	467.7		916.5	I	288.2		271.2		2
8	1,108.6	554.8	1,091.6	1,090.6	R	175.1		158.1		1

PCTK1_HUMAN: LTLNpSPIFDKPLSR



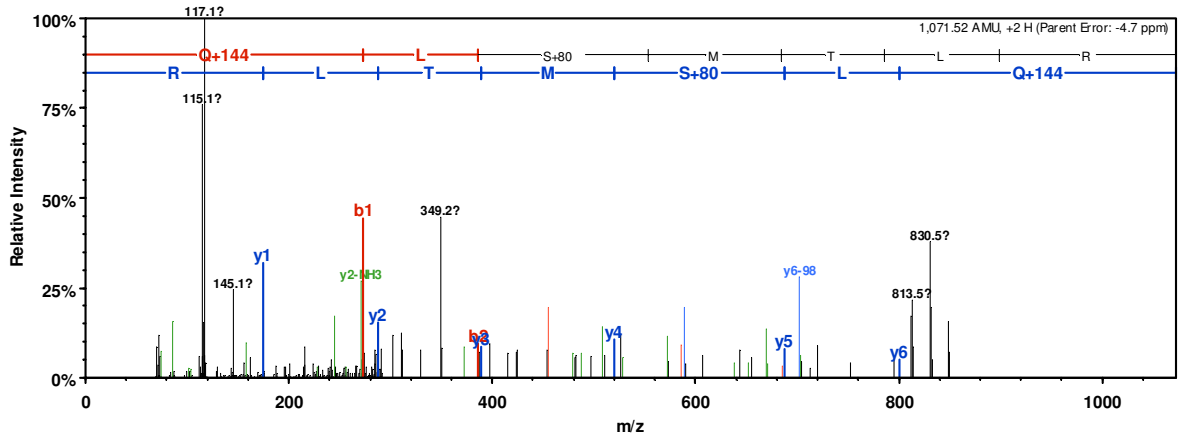
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	258.2				L+144	1,969.1	985.0	1,952.1	1,951.1	14
2	359.2			341.2	T	1,711.9	856.4	1,694.9	1,693.9	13
3	472.3			454.3	L	1,610.8	805.9	1,593.8	1,592.8	12
4	586.4		569.3	568.4	N	1,497.8	749.4	1,480.7	1,479.7	11
5	753.4		736.3	735.4	S+80	1,383.7	692.4	1,366.7	1,365.7	10
6	850.4	425.7	833.4	832.4	P	1,216.7	608.9	1,199.7	1,198.7	9
7	963.5	482.3	946.5	945.5	I	1,119.7	560.3	1,102.6	1,101.7	8
8	1,110.6	555.8	1,093.5	1,092.6	F	1,006.6	503.8	989.6	988.6	7
9	1,225.6	613.3	1,208.6	1,207.6	D	859.5	430.3	842.5	841.5	6
10	1,497.8	749.4	1,480.8	1,479.8	K+144	744.5	372.7	727.5	726.5	5
11	1,594.8	797.9	1,577.8	1,576.8	P	472.3		455.3	454.3	4
12	1,707.9	854.5	1,690.9	1,689.9	L	375.2		358.2	357.2	3
13	1,795.0	898.0	1,777.9	1,777.0	S	262.2		245.1	244.1	2
14	1,969.1	985.0	1,952.1	1,951.1	R	175.1		158.1		1

PCTK1_HUMAN: MGSDGESDQASATSSDEVQpSPVR



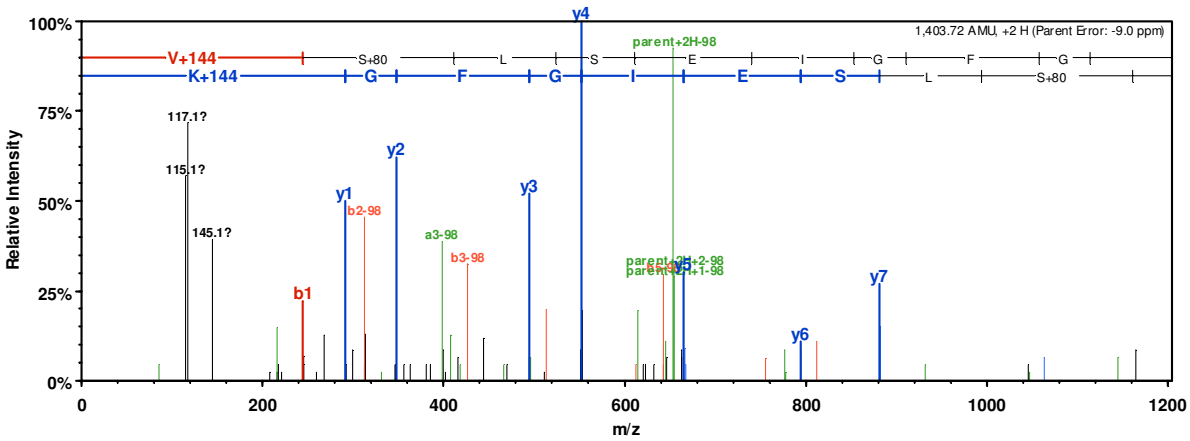
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	292.1				M+1...	2,580.1	1,290.5	2,563.0	2,562.0	23
2	349.2				G	2,288.9	1,145.0	2,271.9	2,270.9	22
3	436.2			418.2	S	2,231.9	1,116.5	2,214.9	2,213.9	21
4	551.2			533.2	D	2,144.9	1,072.9	2,127.8	2,126.9	20
5	608.2			590.2	G	2,029.8	1,015.4	2,012.8	2,011.8	19
6	737.3	369.1		719.3	E	1,972.8	986.9	1,955.8	1,954.8	18
7	824.3	412.7		806.3	S	1,843.8	922.4	1,826.7	1,825.8	17
8	939.3	470.2		921.3	D	1,756.7	878.9	1,739.7	1,738.7	16
9	1,067.4	534.2	1,050.4	1,049.4	Q	1,641.7	821.4	1,624.7	1,623.7	15
10	1,138.4	569.7	1,121.4	1,120.4	A	1,513.7	757.3	1,496.6	1,495.6	14
11	1,225.5	613.2	1,208.4	1,207.5	S	1,442.6	721.8	1,425.6	1,424.6	13
12	1,296.5	648.8	1,279.5	1,278.5	A	1,355.6	678.3	1,338.6	1,337.6	12
13	1,397.6	699.3	1,380.5	1,379.6	T	1,284.5	642.8	1,267.5	1,266.5	11
14	1,484.6	742.8	1,467.6	1,466.6	S	1,183.5	592.3	1,166.5	1,165.5	10
15	1,571.6	786.3	1,554.6	1,553.6	S	1,096.5	548.7	1,079.4	1,078.5	9
16	1,686.7	843.8	1,669.6	1,668.6	D	1,009.4	505.2	992.4	991.4	8
17	1,815.7	908.4	1,798.7	1,797.7	E	894.4	447.7	877.4	876.4	7
18	1,914.8	957.9	1,897.7	1,896.8	V	765.4	383.2	748.3	747.4	6
19	2,042.8	1,021.9	2,025.8	2,024.8	Q	666.3		649.3	648.3	5
20	2,209.8	1,105.4	2,192.8	2,191.8	S+80	538.2		521.2	520.2	4
21	2,306.9	1,153.9	2,289.8	2,288.9	P	371.2		354.2		3
22	2,405.9	1,203.5	2,388.9	2,387.9	V	274.2		257.2		2
23	2,580.1	1,290.5	2,563.0	2,562.0	R	175.1		158.1		1

PCTK1_HUMAN: QLpSMTLR



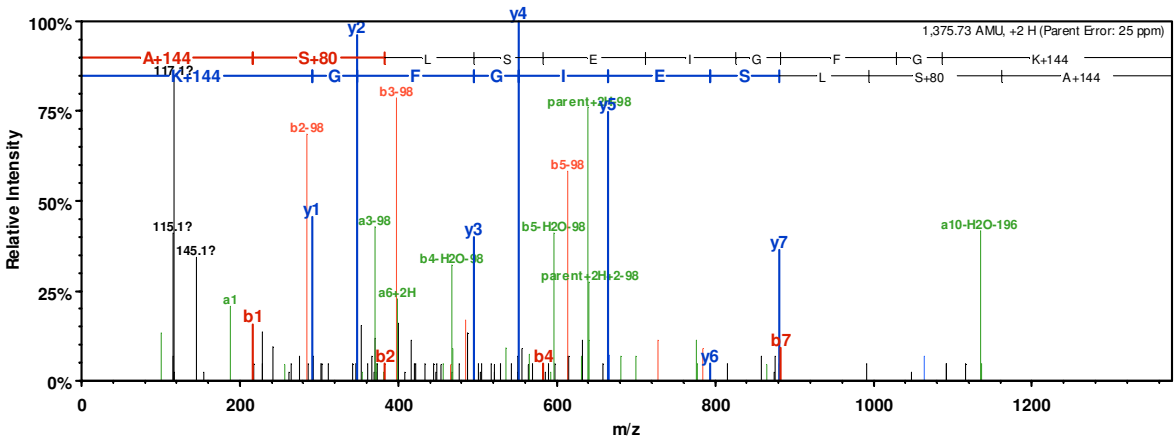
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	273.2		256.1		Q+144	1,072.5	536.8	1,055.5	1,054.5	7
2	386.3		369.2		L	800.4	400.7	783.3	782.4	6
3	553.3		536.2	535.2	S+80	687.3		670.3	669.3	5
4	684.3		667.3	666.3	M	520.3		503.3	502.3	4
5	785.3		768.3	767.3	T	389.3		372.2	371.2	3
6	898.4	449.7	881.4	880.4	L	288.2		271.2		2
7	1,072.5	536.8	1,055.5	1,054.5	R	175.1		158.1		1

PCTK1_HUMAN: VpSLSEIGFGK



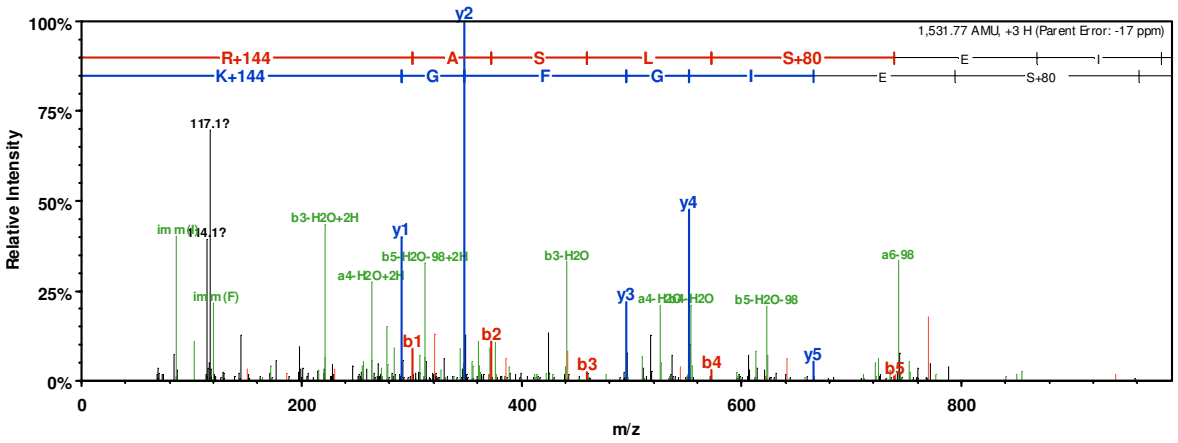
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	244.2				V+144	1,404.7	702.9	1,387.7	1,386.7	10
2	411.2			393.2	S+80	1,161.6	581.3	1,144.5	1,143.6	9
3	524.3			506.3	L	994.6	497.8	977.5	976.6	8
4	611.3			593.3	S	881.5	441.2	864.5	863.5	7
5	740.3			722.3	E	794.5	397.7	777.4	776.4	6
6	853.4	427.2		835.4	I	665.4		648.4		5
7	910.4	455.7		892.4	G	552.3		535.3		4
8	1,057.5	529.3		1,039.5	F	495.3		478.3		3
9	1,114.5	557.8		1,096.5	G	348.2		331.2		2
10	1,404.7	702.9	1,387.7	1,386.7	K+144	291.2		274.2		1

PCTK2_HUMAN: ApSLSEIGFGK



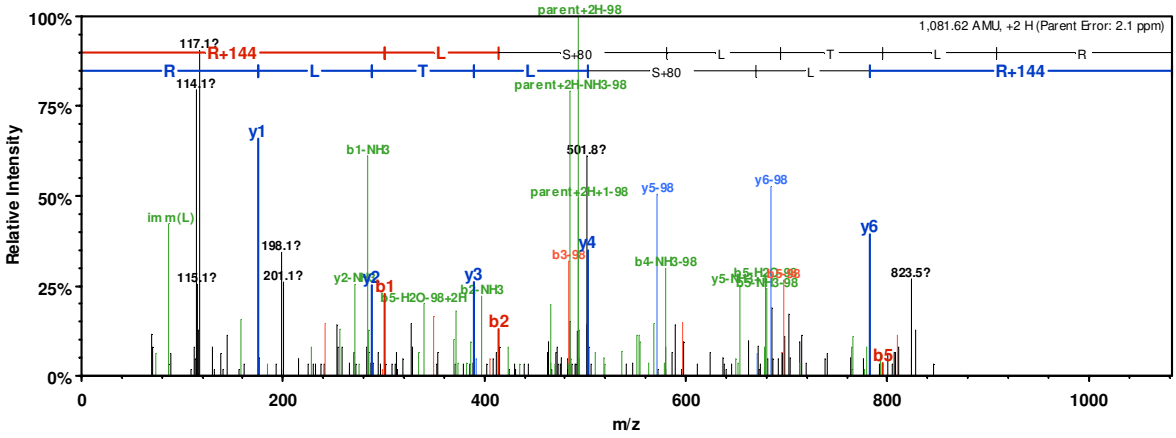
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	216.1				A+144	1,376.7	688.9	1,359.7	1,358.7	10
2	383.1			365.1	S+80	1,161.6	581.3	1,144.5	1,143.6	9
3	496.2			478.2	L	994.6	497.8	977.5	976.6	8
4	583.3			565.3	S	881.5	441.2	864.5	863.5	7
5	712.3			694.3	E	794.5	397.7	777.4	776.4	6
6	825.4	413.2		807.4	I	665.4		648.4		5
7	882.4	441.7		864.4	G	552.3		535.3		4
8	1,029.5	515.2		1,011.5	F	495.3		478.3		3
9	1,086.5	543.8		1,068.5	G	348.2		331.2		2
10	1,376.7	688.9	1,359.7	1,358.7	K+144	291.2		274.2		1

PCTK2_HUMAN: RASLpSEIGFGK



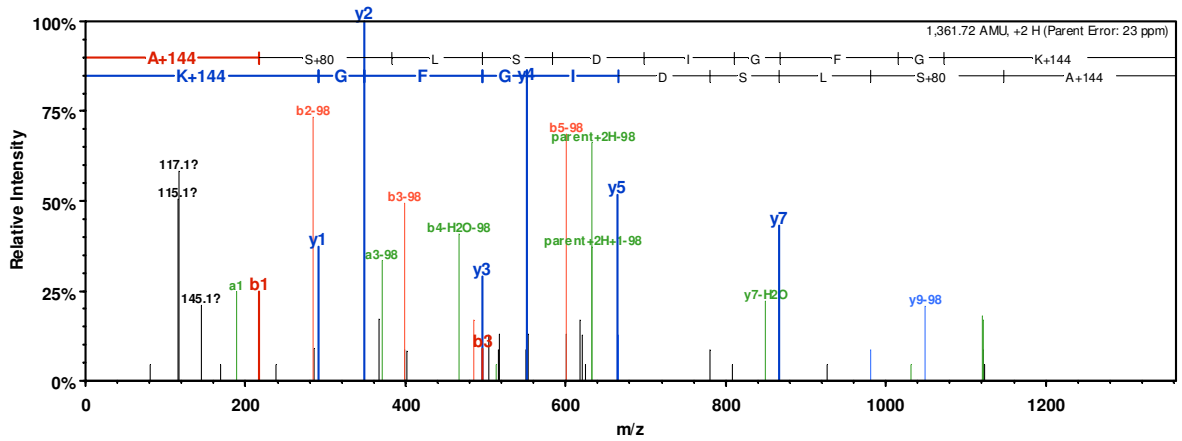
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	301.2	151.1	284.2		R+144	1,532.8	766.9	1,515.8	1,514.8	11
2	372.2	186.6	355.2		A	1,232.6	616.8	1,215.6	1,214.6	10
3	459.3	230.1	442.3	441.3	S	1,161.6	581.3	1,144.5	1,143.6	9
4	572.4	286.7	555.3	554.4	L	1,074.5	537.8	1,057.5	1,056.5	8
5	739.4	370.2	722.3	721.4	S+80	961.5	481.2	944.4	943.4	7
6	868.4	434.7	851.4	850.4	E	794.5	397.7	777.4	776.4	6
7	981.5	491.2	964.5	963.5	I	665.4		648.4		5
8	1,038.5	519.8	1,021.5	1,020.5	G	552.3		535.3		4
9	1,185.6	593.3	1,168.6	1,167.6	F	495.3		478.3		3
10	1,242.6	621.8	1,225.6	1,224.6	G	348.2		331.2		2
11	1,532.8	766.9	1,515.8	1,514.8	K+144	291.2		274.2		1

PCTK2_HUMAN: RLpSLTLR



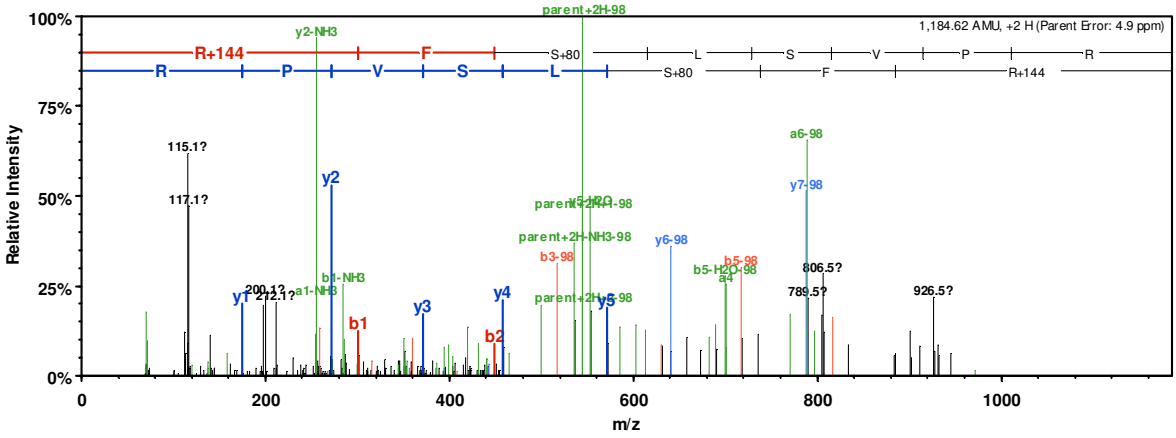
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	301.2	151.1	284.2		R+144	1,082.6	541.8	1,065.6	1,064.6	7
2	414.3	207.7	397.3		L	782.4	391.7	765.4	764.4	6
3	581.3	291.2	564.3	563.3	S+80	669.3		652.3	651.3	5
4	694.4	347.7	677.4	676.4	L	502.3		485.3	484.3	4
5	795.4	398.2	778.4	777.4	T	389.3		372.2	371.2	3
6	908.5	454.8	891.5	890.5	L	288.2		271.2		2
7	1,082.6	541.8	1,065.6	1,064.6	R	175.1		158.1		1

PCTK3_HUMAN: ApSLSDIGFGK



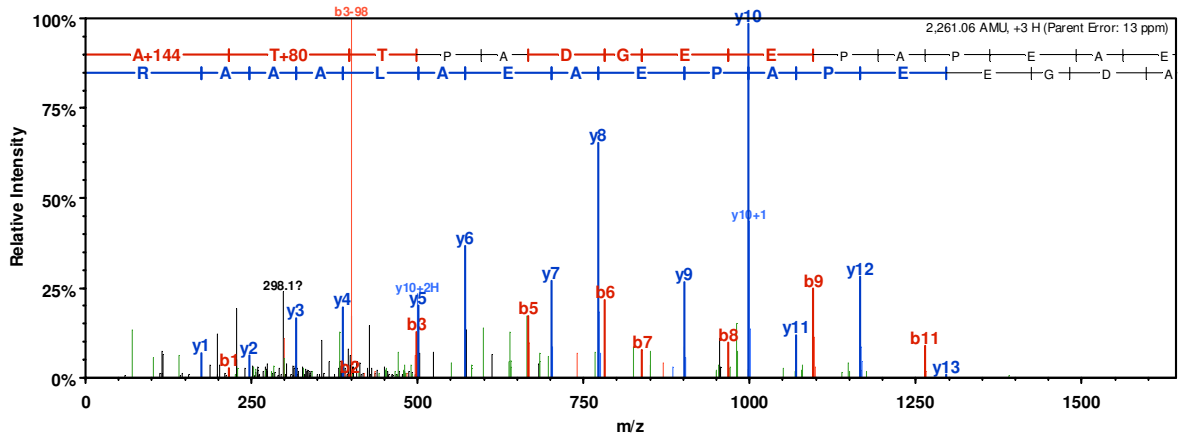
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	216.1				A+144	1,362.7	681.8	1,345.7	1,344.7	10
2	383.1			365.1	S+80	1,147.6	574.3	1,130.5	1,129.5	9
3	496.2			478.2	L	980.6	490.8	963.5	962.5	8
4	583.3			565.3	S	867.5	434.2	850.4	849.5	7
5	698.3			680.3	D	780.4	390.7	763.4	762.4	6
6	811.4	406.2		793.4	I	665.4		648.4		5
7	868.4	434.7		850.4	G	552.3		535.3		4
8	1,015.5	508.2		997.5	F	495.3		478.3		3
9	1,072.5	536.7		1,054.5	G	348.2		331.2		2
10	1,362.7	681.8	1,345.7	1,344.7	K+144	291.2		274.2		1

PCTK3_HUMAN: RFpSLSVPR



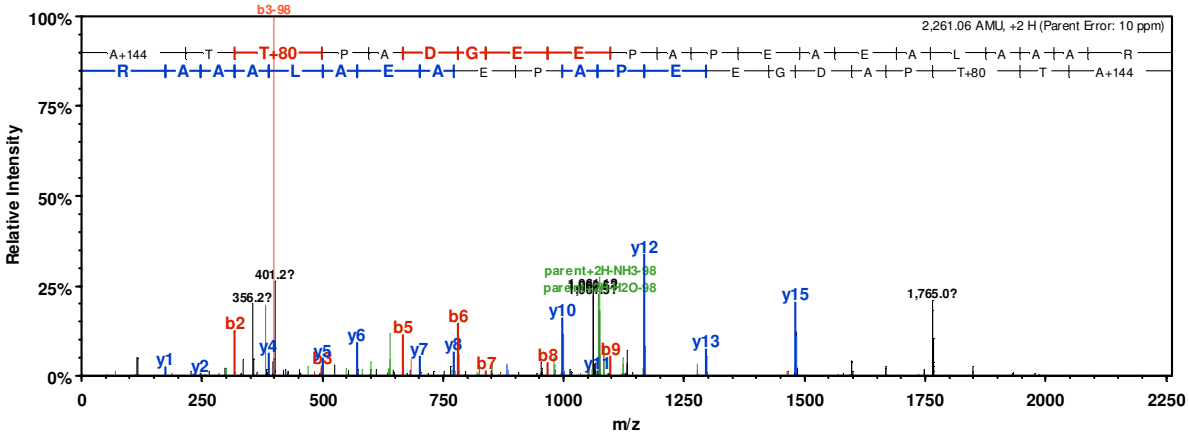
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	301.2	151.1	284.2		R+144	1,185.6	593.3	1,168.6	1,167.6	8
2	448.3	224.6	431.3		F	885.4	443.2	868.4	867.4	7
3	615.3	308.1	598.3	597.3	S+80	738.4	369.7	721.3	720.3	6
4	728.4	364.7	711.3	710.4	L	571.4		554.3	553.3	5
5	815.4	408.2	798.4	797.4	S	458.3		441.2	440.3	4
6	914.5	457.7	897.4	896.5	V	371.2		354.2		3
7	1,011.5	506.3	994.5	993.5	P	272.2		255.1		2
8	1,185.6	593.3	1,168.6	1,167.6	R	175.1		158.1		1

PRPK_HUMAN: ApTTPADGEEPAPEAEALAAAR



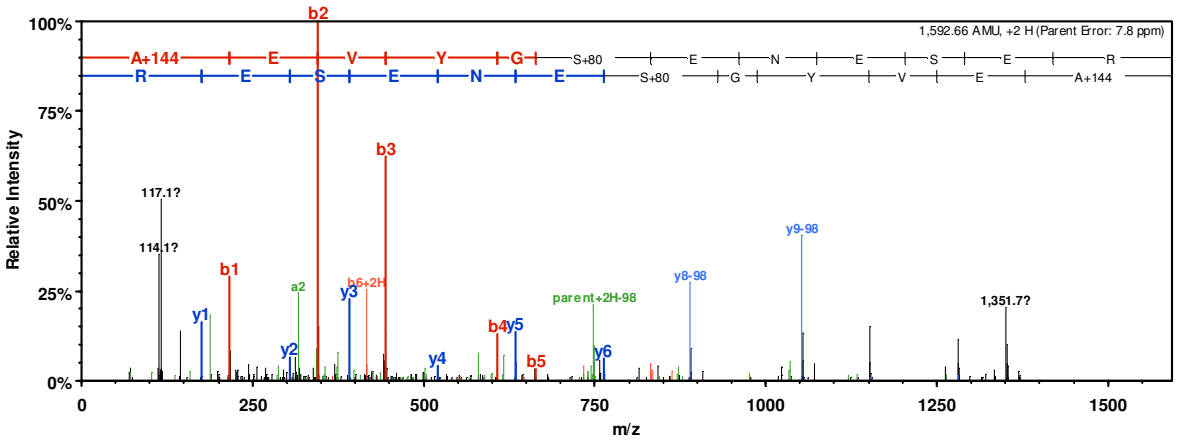
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	216.1				A+144	2,262.0	1,131.5	2,245.0	2,244.0	21
2	397.2			379.2	T+80	2,046.9	1,024.0	2,029.9	2,028.9	20
3	498.2			480.2	T	1,865.9	933.4	1,848.9	1,847.9	19
4	595.3			577.3	P	1,764.8	882.9	1,747.8	1,746.8	18
5	666.3			648.3	A	1,667.8	834.4	1,650.8	1,649.8	17
6	781.3	391.2		763.3	D	1,596.8	798.9	1,579.7	1,578.7	16
7	838.3	419.7		820.3	G	1,481.7	741.4	1,464.7	1,463.7	15
8	967.4	484.2		949.4	E	1,424.7	712.9	1,407.7	1,406.7	14
9	1,096.4	548.7		1,078.4	E	1,295.7	648.3	1,278.6	1,277.6	13
10	1,193.5	597.2		1,175.5	P	1,166.6	583.8	1,149.6	1,148.6	12
11	1,264.5	632.8		1,246.5	A	1,069.6	535.3	1,052.5	1,051.6	11
12	1,361.6	681.3		1,343.6	P	998.5	499.8	981.5	980.5	10
13	1,490.6	745.8		1,472.6	E	901.5	451.2	884.4	883.5	9
14	1,561.7	781.3		1,543.6	A	772.4	386.7	755.4	754.4	8
15	1,690.7	845.9		1,672.7	E	701.4	351.2	684.4	683.4	7
16	1,761.7	881.4		1,743.7	A	572.4	286.7	555.3		6
17	1,874.8	937.9		1,856.8	L	501.3		484.3		5
18	1,945.9	973.4		1,927.8	A	388.2		371.2		4
19	2,016.9	1,009.0		1,998.9	A	317.2		300.2		3
20	2,087.9	1,044.5		2,069.9	A	246.2		229.1		2
21	2,262.0	1,131.5	2,245.0	2,244.0	R	175.1		158.1		1

PRPK_HUMAN: ATpTPADGEEPAPEAEALAAAR



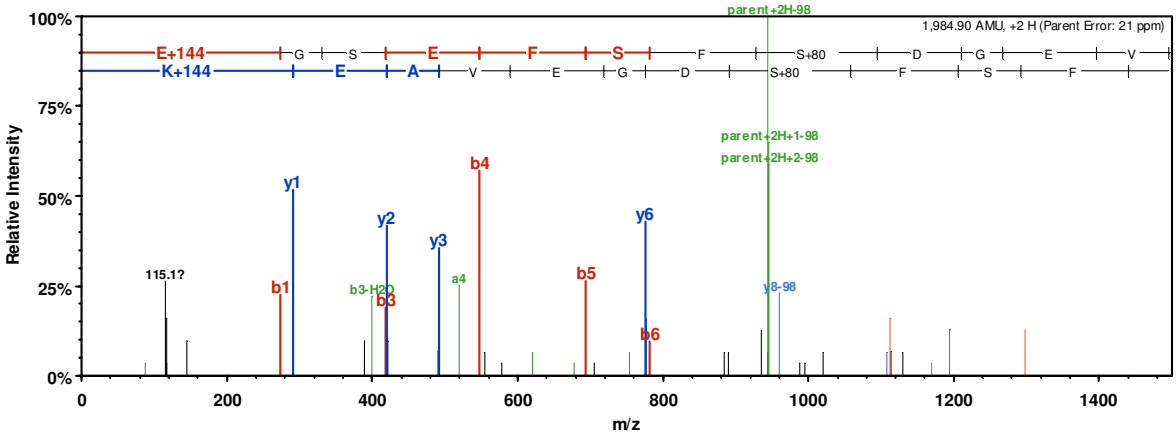
B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	216.1				A+144	2,262.0	1,131.5	2,245.0	2,244.0	21
2	317.2			299.2	T	2,046.9	1,024.0	2,029.9	2,028.9	20
3	498.2			480.2	T+80	1,945.9	973.4	1,928.8	1,927.8	19
4	595.3			577.3	P	1,764.8	882.9	1,747.8	1,746.8	18
5	666.3			648.3	A	1,667.8	834.4	1,650.8	1,649.8	17
6	781.3	391.2		763.3	D	1,596.8	798.9	1,579.7	1,578.7	16
7	838.3	419.7		820.3	G	1,481.7	741.4	1,464.7	1,463.7	15
8	967.4	484.2		949.4	E	1,424.7	712.9	1,407.7	1,406.7	14
9	1,096.4	548.7		1,078.4	E	1,295.7	648.3	1,278.6	1,277.6	13
10	1,193.5	597.2		1,175.5	P	1,166.6	583.8	1,149.6	1,148.6	12
11	1,264.5	632.8		1,246.5	A	1,069.6	535.3	1,052.5	1,051.6	11
12	1,361.6	681.3		1,343.6	P	998.5	499.8	981.5	980.5	10
13	1,490.6	745.8		1,472.6	E	901.5	451.2	884.4	883.5	9
14	1,561.7	781.3		1,543.6	A	772.4	386.7	755.4	754.4	8
15	1,690.7	845.9		1,672.7	E	701.4	351.2	684.4	683.4	7
16	1,761.7	881.4		1,743.7	A	572.4	286.7	555.3		6
17	1,874.8	937.9		1,856.8	L	501.3		484.3		5
18	1,945.9	973.4		1,927.8	A	388.2		371.2		4
19	2,016.9	1,009.0		1,998.9	A	317.2		300.2		3
20	2,087.9	1,044.5		2,069.9	A	246.2		229.1		2
21	2,262.0	1,131.5	2,245.0	2,244.0	R	175.1		158.1		1

RIOK2_HUMAN: AEVYGpSENESER



B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	216.1				A+144	1,593.7	797.3	1,576.6	1,575.6	12
2	345.2			327.2	E	1,378.5	689.8	1,361.5	1,360.5	11
3	444.3			426.2	V	1,249.5	625.2	1,232.4	1,231.5	10
4	607.3			589.3	Y	1,150.4	575.7	1,133.4	1,132.4	9
5	664.3			646.3	G	987.3	494.2	970.3	969.3	8
6	831.3	416.2		813.3	S+80	930.3	465.7	913.3	912.3	7
7	960.4	480.7		942.4	E	763.3	382.2	746.3	745.3	6
8	1,074.4	537.7	1,057.4	1,056.4	N	634.3		617.3	616.3	5
9	1,203.5	602.2	1,186.4	1,185.5	E	520.2		503.2	502.2	4
10	1,290.5	645.8	1,273.5	1,272.5	S	391.2		374.2	373.2	3
11	1,419.5	710.3	1,402.5	1,401.5	E	304.2		287.1	286.2	2
12	1,593.7	797.3	1,576.6	1,575.6	R	175.1		158.1		1

RIOK2_HUMAN: EGSEFSFpSDGEVAEK



B	B Ions	B+2H	B-NH3	B-H2O	AA	Y Ions	Y+2H	Y-NH3	Y-H2O	Y
1	274.2			256.1	E+144	1,985.9	993.4	1,968.8	1,967.9	15
2	331.2			313.2	G	1,712.7	856.9	1,695.7	1,694.7	14
3	418.2			400.2	S	1,655.7	828.4	1,638.7	1,637.7	13
4	547.2			529.2	E	1,568.7	784.8	1,551.6	1,550.7	12
5	694.3			676.3	F	1,439.6	720.3	1,422.6	1,421.6	11
6	781.3	391.2		763.3	S	1,292.6	646.8	1,275.5	1,274.5	10
7	928.4	464.7		910.4	F	1,205.5	603.3	1,188.5	1,187.5	9
8	1,095.4	548.2		1,077.4	S+80	1,058.5	529.7	1,041.4	1,040.4	8
9	1,210.4	605.7		1,192.4	D	891.5	446.2	874.4	873.4	7
10	1,267.5	634.2		1,249.5	G	776.4	388.7	759.4	758.4	6
11	1,396.5	698.8		1,378.5	E	719.4		702.4	701.4	5
12	1,495.6	748.3		1,477.6	V	590.4		573.3	572.4	4
13	1,566.6	783.8		1,548.6	A	491.3		474.3	473.3	3
14	1,695.7	848.3		1,677.6	E	420.3		403.2	402.2	2
15	1,985.9	993.4	1,968.8	1,967.9	K+144	291.2		274.2		1