

Additional file 5

Representative mass spectra of the AP-F13A1 activation peptide

a - Annotated MS/MS spectrum of the Acetyl-SETSRTAFGGRRVPPNNSNAAEDDLPTVELQGVVPR peptide ($MH^+ = 3,949.981$, $m/z = 988.251$ ($z=4$)), identified as the first largest form of the activation peptide of the coagulation factor XIII (AP-F13A1)

b - Annotated MS/MS spectrum of the Acetyl-SETSRTAFGGRRVPPNNSNAAEDDLPTVELQGLVPR peptide ($MH^+ = 3,963.9938$, $m/z = 991.753$ ($z=4$)), identified as the second largest form of the AP-F13A1

c - Annotated MS/MS spectrum of the TAFGGRRVPPNNSNAAEDDLPTVELQGVVPR peptide ($MH^+ = 3,347.710$, $m/z = 837.683$ ($z=4$)), identified as one of the intermediate form of the AP-F13A1

d - Annotated MS/MS spectrum of the TAFGGRRVPPNNSNAAEDDLPTVELQGL VPR peptide ($MH^+ = 3,361.723$, $m/z = 841.186$ ($z=4$)), identified as one of the intermediate form of the AP-F13A1

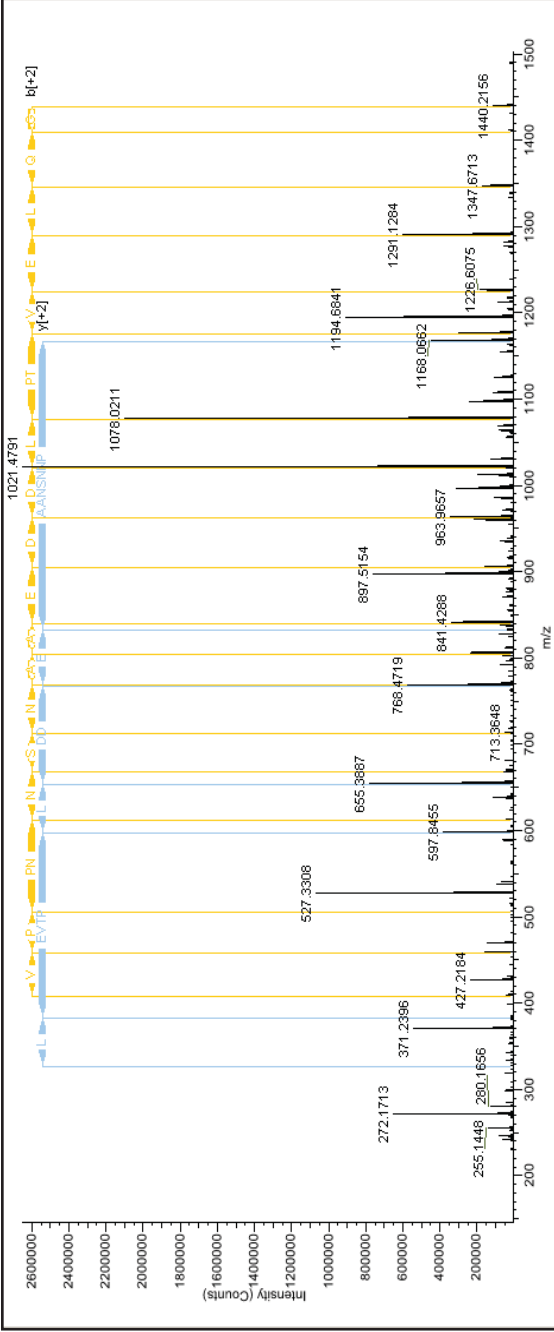
e - Annotated MS/MS spectrum of the RAVPPNNSNAAEDDLPTVELQGVVPR peptide ($MH^+ = 2,758.408$, $m/z = 920.141$ ($z=3$)), identified as one of the intermediate form of the AP-F13A1

f - Annotated MS/MS spectrum of the RAVPPNNSNAAEDDLPTVELQGLVPR peptide ($MH^+ = 2,772.428$, $m/z = 924.814$ ($z=3$)), identified as one of the intermediate form of the AP-F13A1

g - Annotated MS/MS spectrum of the AVPPNNSNAAEDDLPTVELQGVVPR peptide ($MH^+ = 2,602.314$, $m/z = 868.109$ ($z=3$)), identified as the shortest form of the AP-F13A1

h - Annotated MS/MS spectrum of the AVPPNNSNAAEDDLPTVELQGLVPR peptide ($MH^+ = 2,616.322$, $m/z = 872.779$ ($z=3$)), identified as the shortest form of the AP-F13A1

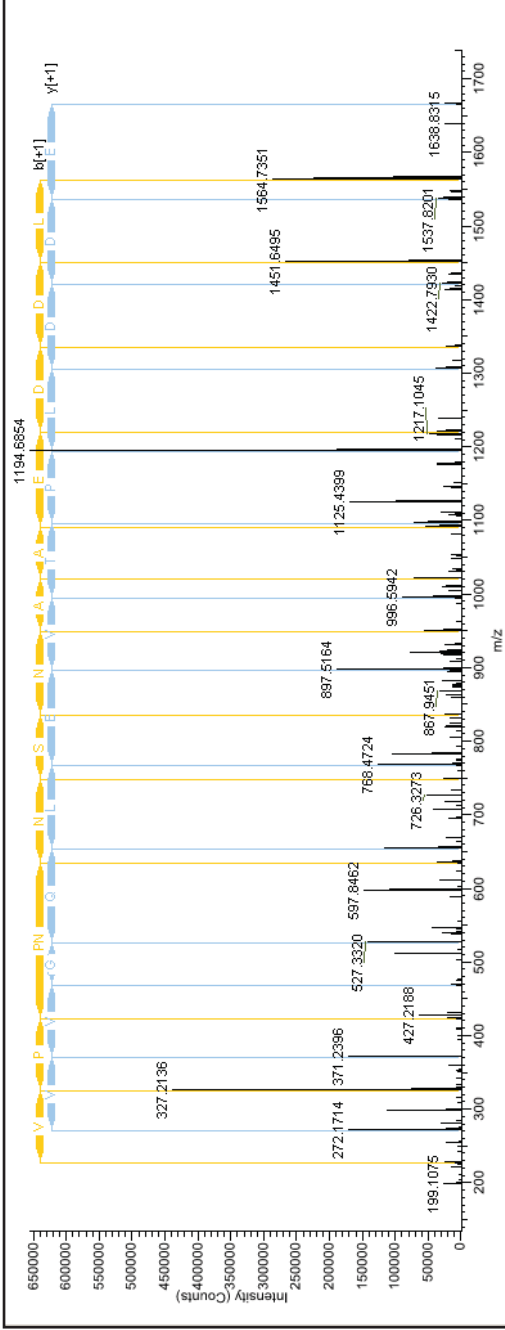
C



T A F G R R A V J P P N J N S J N J A J A E J D J L P T J V J E L J Q J G J V V P R

#1	b*	b ²⁺	b ³⁺	b ⁴⁺	Seq.	y*	y ²⁺	y ³⁺	y ⁴⁺	#2
1	102.05496	51.53112	34.68984	26.26920	T					32
2	173.09208	87.04968	58.36888	44.02848	A	3246.66159	1623.83443	1082.89205	812.42086	31
3	320.16050	160.58389	107.39168	80.79558	F	3175.62447	1588.31587	1059.21301	794.66158	30
4	377.18197	189.09462	126.39884	95.05095	G	3028.55605	1514.78166	1010.19020	757.89447	29
5	434.20344	217.60536	145.40600	109.30632	G	2971.53458	1486.27093	991.18304	743.63910	28
6	590.30456	295.65592	197.43970	148.33160	R	2914.51311	1457.76019	972.17589	729.38374	27
7	746.40568	373.70648	249.47341	187.35688	R	2758.41199	1379.70963	920.14218	690.35846	26
8	817.44280	409.22504	273.15245	205.11616	A	2602.31087	1301.65907	868.10847	651.33318	25
9	916.51122	458.75925	306.17526	229.88326	V	2531.27375	1266.14051	844.42943	633.57390	24
10	1013.56399	507.28563	338.52618	254.14645	P	2432.20533	1216.60630	811.40663	608.80679	23
11	1110.61676	555.81202	370.87710	278.40965	P	2335.15256	1168.07992	779.05570	584.54360	22
12	1224.65969	612.83348	408.89141	306.92038	N	2238.09979	1119.55353	746.70478	560.28041	21
13	1338.70262	669.85495	446.90572	335.43111	N	2124.05686	1062.53207	708.69047	531.76967	20
14	1425.73465	713.37096	475.91640	357.18912	S	2010.01393	1005.51060	670.67616	503.25894	19
15	1539.77758	770.39243	513.93071	385.69985	N	1922.98190	961.99459	641.66548	481.50093	18
16	1610.81470	805.91099	537.60975	403.45913	A	1808.93897	904.97312	603.65117	452.99020	17
17	1681.85182	841.42955	561.28879	421.21841	A	1737.90185	869.45456	579.97213	435.23092	16
18	1810.89442	905.95085	604.30299	453.47906	E	1666.86473	833.93600	556.29309	417.47164	15
19	1925.92137	963.46432	642.64531	482.23580	D	1537.82213	769.41470	513.27889	385.21095	14
20	2040.94832	1020.97780	680.98762	510.99254	D	1422.79518	711.90123	474.93658	356.45425	13
21	2154.03239	1077.51983	718.68231	539.26355	L	1307.76823	654.38775	436.59426	327.69752	12
22	2251.08516	1126.04622	751.03324	563.52675	P	1194.68416	597.84572	398.89957	299.42850	11
23	2352.13284	1176.57006	784.71580	588.78867	T	1097.63139	549.31933	366.54865	275.16331	10
24	2451.20126	1226.10427	817.73860	613.55577	V	996.58371	498.79549	332.86609	249.90139	9
25	2580.24386	1290.62557	860.75280	645.81642	E	897.51529	449.26128	299.84328	225.13428	8
26	2693.32793	1347.16760	898.44749	674.08744	L	768.47269	384.73998	256.82008	192.87363	7
27	2821.38651	1411.19689	941.13369	706.10208	Q	655.38862	328.19795	219.13439	164.60261	6
28	2878.40798	1439.70763	960.14084	720.35745	G	527.33004	264.16866	176.44820	132.58797	5
29	2977.47640	1489.24184	993.16365	745.12456	V	470.30857	235.65792	157.44104	118.33260	4
30	3076.54482	1538.77605	1026.18646	769.89166	V	371.24015	186.12371	124.41823	93.56550	3
31	3173.59759	1587.30243	1058.53738	794.15485	P	272.17173	136.58950	91.39543	68.79839	2
32					R	175.11896	88.06312	59.04450	44.53520	1

e



R A V V P P N J N S J N J A A E S D D L L P T V E L Q G V V P R

#1	b*	b ²⁺	b ³⁺	Seq.	y*	y ²⁺	y ³⁺	#2
1	157.10840	79.05784	53.04098	R				26
2	228.14552	114.57640	76.72002	A	2602.31087	1301.65907	868.10847	25
3	327.21394	164.11061	109.74283	V	2531.27375	1266.14051	844.42943	24
4	424.26671	212.63699	142.09375	P	2432.20533	1216.60630	811.40663	23
5	521.31948	261.16338	174.44468	P	2335.15256	1168.07992	779.05570	22
6	635.36241	318.18484	212.45899	N	2238.09979	1119.55353	746.70478	21
7	749.40534	375.20631	250.47330	N	2124.05686	1062.53207	708.69047	20
8	836.43737	418.72232	279.48397	S	2010.01393	1005.51060	670.67616	19
9	950.48030	475.74379	317.49828	N	1922.98190	961.99459	641.66548	18
10	1021.51742	511.26235	341.17732	A	1808.93897	904.97312	603.65117	17
11	1092.55454	546.78091	364.86636	A	1737.90185	869.45456	579.97213	16
12	1221.59714	611.30221	407.87056	E	1666.86473	833.93600	556.29309	15
13	1336.62409	668.81568	446.21288	D	1537.82213	769.41470	513.27889	14
14	1451.65104	726.32916	484.55520	D	1422.79518	711.90123	474.93658	13
15	1564.73511	782.87119	522.24989	L	1307.76823	654.38775	436.59426	12
16	1661.78788	831.39758	554.60081	P	1194.68416	597.84572	398.89957	11
17	1762.83556	881.92142	588.28337	T	1097.63139	549.31933	366.54865	10
18	1861.90398	931.45563	621.30618	V	996.58371	498.79549	332.86609	9
19	1990.94658	995.97693	664.32038	E	897.51529	449.26128	299.84328	8
20	2104.03065	1052.51896	702.01507	L	768.47269	384.73998	256.82908	7
21	2232.08923	1116.54825	744.70126	Q	655.38862	328.19795	219.13439	6
22	2289.11070	1145.05899	763.70842	G	527.33004	264.16866	176.44820	5
23	2388.17912	1194.59320	796.73122	V	470.30857	235.65792	157.44104	4
24	2487.24754	1244.12741	829.75403	V	371.24015	186.12371	124.41823	3
25	2584.30031	1292.65379	862.10495	P	272.17173	136.58950	91.39543	2
26				R	175.11896	88.06312	59.04450	1

