Supporting information of S. Abdul *et al*: On the localization of the cleavage site in human alpha-2-antiplasmin, involved in the generation of the non-plasminogen binding form.

Table S1. Inclusion list of 26 m/z peptide masses favored for MS2 fragmentation by HCD and EThcD.
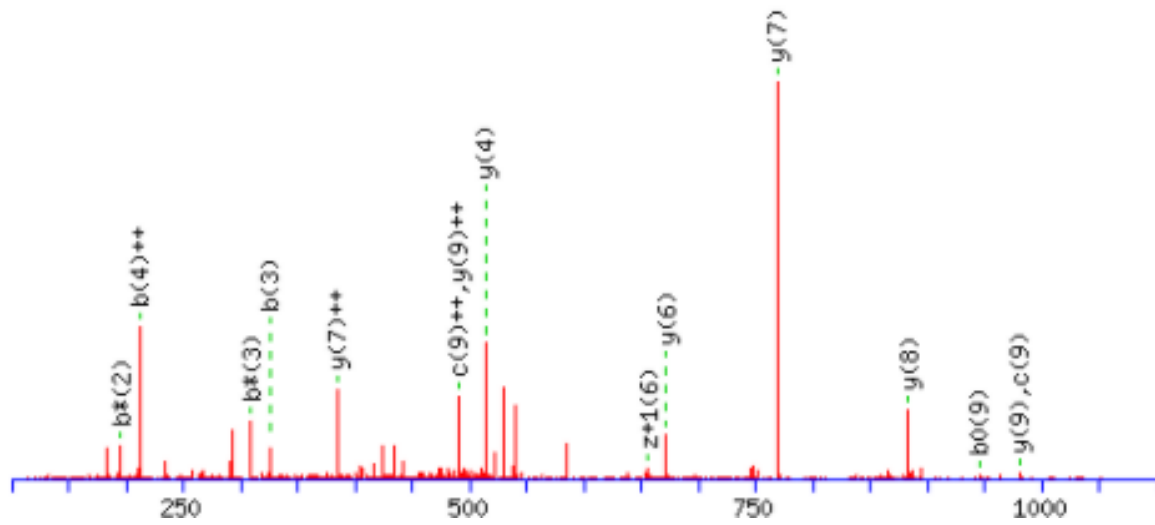
Sequence	Amino acids	z	MC	m/z
R.ELKEQQ.D	416-421	2	0	387.7032
R.ELKEQQ.D*	416-421	2	0	388.1952
R.ELKEQQ.D**	416-421	2	0	388.6872
R.ELKEQQD.S	416-422	2	0	445.2167
R.ELKEQQD.S*	416-422	2	0	445.7087
R.ELKEQQD.S**	416-422	2	0	446.2007
R.NPNPSAPRELKEQQ.D	408-421	2	1	804.4104
R.NPNPSAPRELKEQQ.D*	408-421	2	1	804.9024
R.NPNPSAPRELKEQQ.D**	408-421	2	1	805.3944
R.NPNPSAPRELKEQQ.D***	408-421	2	1	805.8864
R.NPNPSAPRELKEQQ.D****	408-421	2	1	806.3784
R.NPNPSAPRELKEQQ.D	408-421	3	1	536.6094
R.NPNPSAPRELKEQQ.D*	408-421	3	1	536.9374
R.NPNPSAPRELKEQQ.D**	408-421	3	1	537.2654
R.NPNPSAPRELKEQQ.D***	408-421	3	1	537.5934
R.NPNPSAPRELKEQQ.D****	408-421	3	1	537.9214
R.NPNPSAPRELKEQQD.S	408-422	2	1	861.9239
R.NPNPSAPRELKEQQD.S*	408-422	2	1	862.4159
R.NPNPSAPRELKEQQD.S**	408-422	2	1	862.9079
R.NPNPSAPRELKEQQD.S***	408-422	2	1	863.3999
R.NPNPSAPRELKEQQD.S****	408-422	2	1	863.8919
R.NPNPSAPRELKEQQD.S	408-422	3	1	574.9517

R.NPNPSAPRELKEQQD.S*	408-422	3	1	575.2797
R.NPNPSAPRELKEQQD.S**	408-422	3	1	575.6077
R.NPNPSAPRELKEQQD.S***	408-422	3	1	575.9357
R.NPNPSAPRELKEQQD.S****	408-422	3	1	576.2637

z: charge state of peptide, MC: number of miscleavages, m/z: the observed mass/charge. The number of deamidations are indicated by the asterisks.
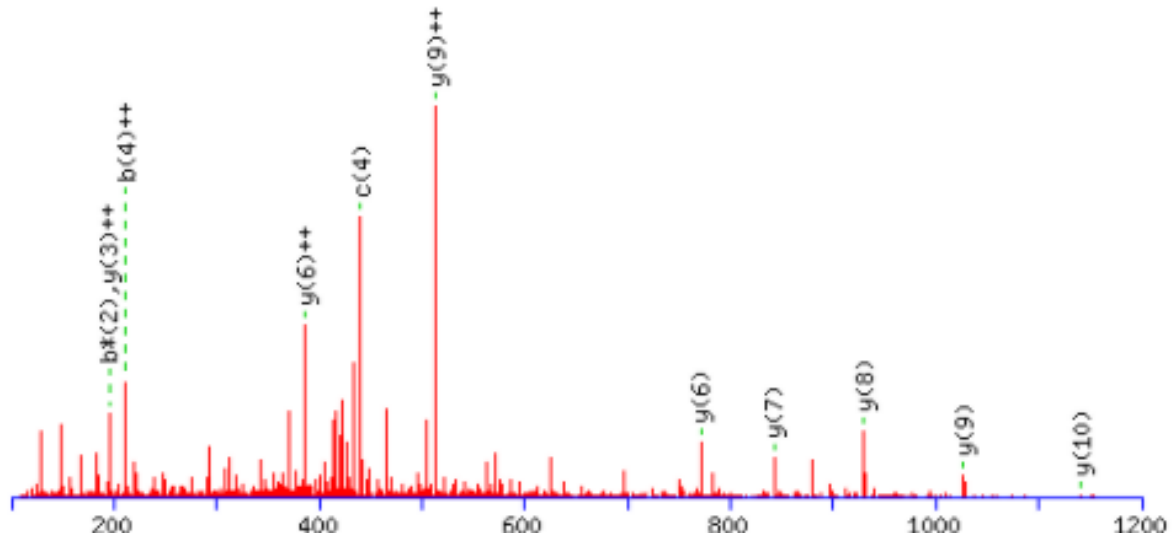
Score: 35

#	b	b++	b*	b*++	b0	b0++	c	c++	Seq.	w	y	y++	y*	y*++	y0	y0++	z+1	z+1++	z+2	z+2++	#
1	115.0502	58.0287	98.0237	49.5155			132.0768	66.5420	N												10
2	212.1030	106.5551	195.0764	98.0418			229.1295	115.0684	P	937.4738	980.5160	490.7616	963.4894	482.2483	962.5054	481.7563	964.4972	482.7523	965.5051	483.2562	9
3	326.1459	163.5766	309.1193	155.0633			343.1724	172.0899	N	823.4308	883.4632	442.2352	866.4367	433.7220	865.4526	433.2300	867.4445	434.2259	868.4523	434.7298	8
4	423.1987	212.1030	406.1721	203.5897			440.2252	220.6162	P	726.3781	769.4203	385.2138	752.3937	376.7005	751.4097	376.2085	753.4016	377.2044	754.4094	377.7083	7
5	510.2307	255.6190	493.2041	247.1057	492.2201	246.6137	527.2572	264.1323	S	639.3461	672.3675	336.6874	655.3410	328.1741	654.3570	327.6821	656.3488	328.6780	657.3566	329.1819	6
6	581.2678	291.1375	564.2413	282.6243	563.2572	282.1323	598.2943	299.6508	A		585.3355	293.1714	568.3089	284.6581	567.3249	284.1661	569.3168	285.1620	570.3246	285.6659	5
7	678.3206	339.6639	661.2940	331.1506	660.3100	330.6586	695.3471	348.1772	P	471.2562	514.2984	257.6528	497.2718	249.1396	496.2878	248.6475	498.2796	249.6435	499.2875	250.1474	4
8	834.4217	417.7145	817.3951	409.2012	816.4111	408.7092	851.4482	426.2278	R	315.1551	417.2456	209.1264	400.2191	200.6132	399.2350	200.1212	401.2269	201.1171	402.2347	201.6210	3
9	963.4643	482.2358	946.4377	473.7225	945.4537	473.2305	980.4908	490.7490	E		261.1445	131.0759					243.1339	122.0706	245.1258	123.0665	246.1336	123.5704	2
10									L		132.1019	66.5546							116.0832	58.5452	117.0910	59.0491	1

Fig. S1. MS/MS fragmentation spectra of the Asn408-Leu417 peptide in an overnight Arg-C digest of NPB-α2AP as determined by Mascot analysis. Best spectrum data is shown.
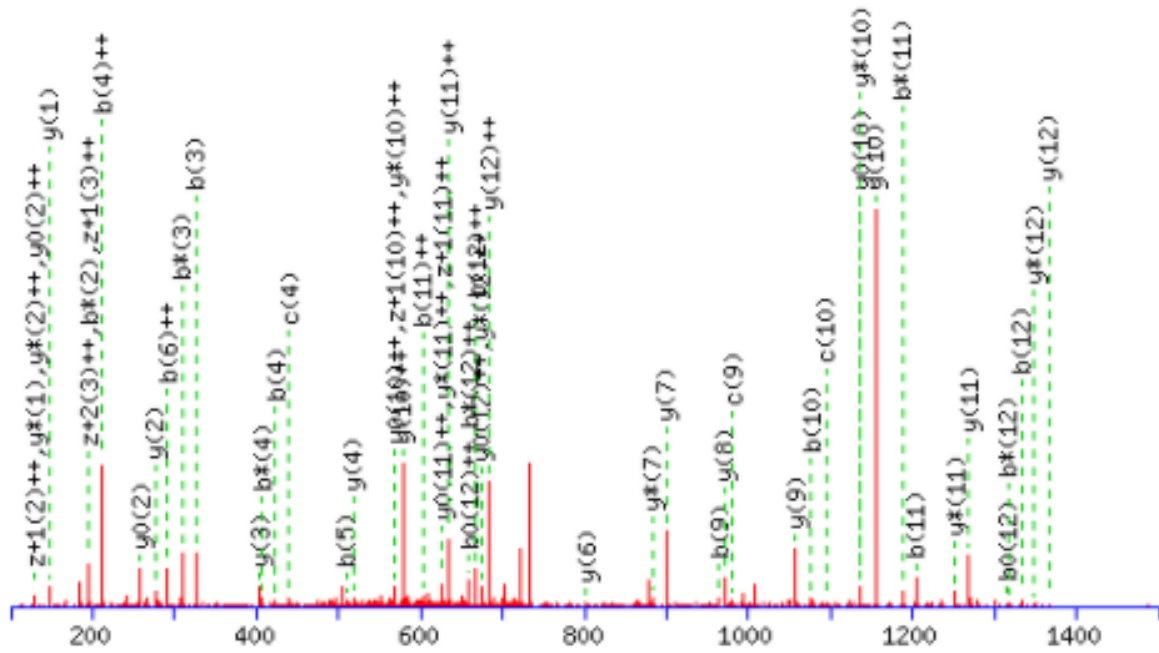
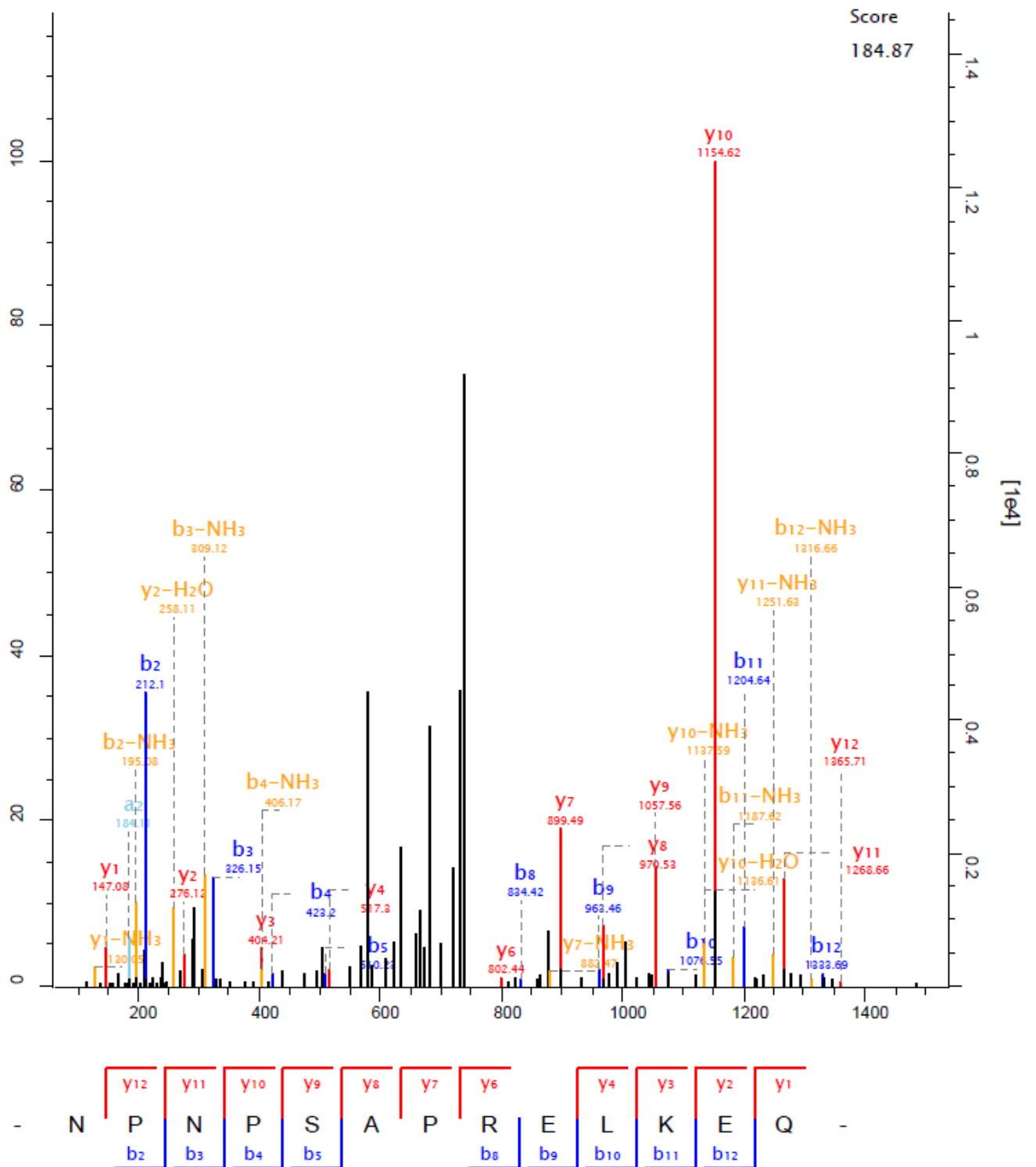| #	b	b⁺⁺	b*	b*⁺⁺	b⁰	b⁰⁺⁺	c	c⁺⁺	Seq.	w	y	y⁺⁺	y*	y*⁺⁺	y⁰	y⁰⁺⁺	z+1	z+1⁺⁺	z+2	z+2⁺⁺	#
1	115.0502	58.0287	98.0237	49.5155			132.0768	66.5420	N												12
2	212.1030	106.5551	195.0764	98.0418			229.1295	115.0684	P	1194.6113	1237.6535	619.3304	1220.6270	610.8171	1219.6430	610.3251	1221.6348	611.3210	1222.6426	611.8250	11
3	326.1459	163.5766	309.1193	155.0633			343.1724	172.0899	N	1080.5684	1140.6008	570.8040	1123.5742	562.2907	1122.5902	561.7987	1124.5820	562.7947	1125.5899	563.2986	10
4	423.1987	212.1030	406.1721	203.5897			440.2252	220.6162	P	983.5156	1026.5578	513.7826	1009.5313	505.2693	1008.5473	504.7773	1010.5391	505.7732	1011.5469	506.2771	9
5	510.2307	255.6190	493.2041	247.1057	492.2201	246.6137	527.2572	264.1323	S	896.4836	929.5051	465.2562	912.4785	456.7429	911.4945	456.2509	913.4863	457.2468	914.4942	457.7507	8
6	581.2678	291.1375	564.2413	282.6243	563.2572	282.1323	598.2943	299.6508	A		842.4730	421.7402	825.4465	413.2269	824.4625	412.7349	826.4543	413.7308	827.4621	414.2347	7
7	678.3206	339.6639	661.2940	331.1506	660.3100	330.6586	695.3471	348.1772	P	728.3937	771.4359	386.2216	754.4094	377.7083	753.4254	377.2163	755.4172	378.2122	756.4250	378.7162	6
8	834.4217	417.7145	817.3951	409.2012	816.4111	408.7092	851.4482	426.2278	R	572.2926	674.3832	337.6952	657.3566	329.1819	656.3726	328.6899	658.3644	329.6859	659.3723	330.1898	5
9	963.4643	482.2358	946.4377	473.7225	945.4537	473.2305	980.4908	490.7490	E		518.2821	259.6447	501.2555	251.1314	500.2715	250.6394	502.2633	251.6353	503.2712	252.1392	4
10	1076.5483	538.7778	1059.5218	530.2645	1058.5378	529.7725	1093.5749	547.2911	L		389.2395	195.1234	372.2129	186.6101	371.2289	186.1181	373.2207	187.1140	374.2286	187.6179	3
11	1204.6433	602.8253	1187.6167	594.3120	1186.6327	593.8200	1221.6698	611.3386	K		276.1554	138.5813	259.1288	130.0681	258.1448	129.5761	260.1367	130.5720	261.1445	131.0759	2
12									E		148.0604	74.5339			130.0499	65.5286	132.0417	66.5245	133.0495	67.0284	1

Fig. S2. MS/MS fragmentation spectra of the Asn408-Glu419 peptide in an overnight Arg-C digest of NPB-α2AP as determined by Mascot analysis. Best spectrum data is shown.

4

A

Score: 58

#	b	b++	b*	b*++	b0	b0++	c	c++	Seq.	w	y	y++	y*	y*++	y0	y0++	z+1	z+1++	z+2	z+2++	#
1	115.0502	58.0287	98.0237	49.5155			132.0768	66.5420	N												13
2	212.1030	106.5551	195.0764	98.0418			229.1295	115.0684	P	1322.6699	1365.7121	683.3597	1348.6856	674.8464	1347.7015	674.3544	1349.6934	675.3503	1350.7012	675.8542	12
3	326.1459	163.5766	309.1193	155.0633			343.1724	172.0899	N	1208.6270	1268.6593	634.8333	1251.6328	626.3200	1250.6488	625.8280	1252.6406	626.8239	1253.6484	627.3279	11
4	423.1987	212.1030	406.1721	203.5897			440.2252	220.6162	P	1111.5742	1154.6164	577.8118	1137.5899	569.2986	1136.6058	568.8066	1138.5977	569.8025	1139.6055	570.3064	10
5	510.2307	255.6190	493.2041	247.1057	492.2201	246.6137	527.2572	264.1323	S	1024.5422	1057.5636	529.2855	1040.5371	520.7722	1039.5531	520.2802	1041.5449	521.2761	1042.5528	521.7800	9
6	581.2678	291.1375	564.2413	282.6243	563.2572	282.1323	598.2943	299.6508	A		970.5316	485.7694	953.5051	477.2562	952.5211	476.7642	954.5129	477.7601	955.5207	478.2640	8
7	678.3206	339.6639	661.2940	331.1506	660.3100	330.6586	695.3471	348.1772	P	856.4523	899.4945	450.2509	882.4680	441.7376	881.4839	441.2456	883.4758	442.2415	884.4836	442.7454	7
8	834.4217	417.7145	817.3951	409.2012	816.4111	408.7092	851.4482	426.2278	R	700.3512	802.4417	401.7245	785.4152	393.2112	784.4312	392.7192	786.4230	393.7151	787.4308	394.2191	6
9	963.4643	482.2358	946.4377	473.7225	945.4537	473.2305	980.4908	490.7490	E	646.3406		323.6740	629.3141	315.1607	628.3301	314.6687	630.3219	315.6646	631.3297	316.1685	5
10	1076.5483	538.7778	1059.5218	530.2645	1058.5378	529.7725	1093.5749	547.2911	L		517.2980	259.1527	500.2715	250.6394	499.2875	250.1474	501.2793	251.1433	502.2871	251.6472	4
11	1204.6433	602.8253	1187.6167	594.3120	1186.6327	593.8200	1221.6698	611.3386	K		404.2140	202.6106	387.1874	194.0974	386.2034	193.6053	388.1953	194.6013	389.2031	195.1052	3
12	1333.6859	667.3466	1316.6593	658.8333	1315.6753	658.3413	1350.7124	675.8599	E		276.1190	138.5631	259.0925	130.0499	258.1084	129.5579	260.1003	130.5538	261.1081	131.0577	2
13									Q		147.0764	74.0418	130.0499	65.5286			131.0577	66.0325	132.0655	66.5364	1

B

Score
184.87

y10
1154.62

b3–NH3
309.12

y2–H2O
258.11

b2
212.1

b12–NH3
1316.66

y11–NH3
1251.63

b11
1204.64

y10–NH3
1137.59

b2–NH3
195.08

b4–NH3
406.17

y12
1365.71

a2
184.1

y9
1057.56

b11–NH3
1187.62

y1
147.08

y7
899.49

y8
970.53

y10–H2O
1136.61

y11
1268.66

b3
326.15

y2
276.12

y3
406.21

y4
517.3

b4
423.2

b8
834.42

b9
963.46

y1–NH3
130.05

b5
550.13

y6
802.44

y7–NH3
882.47

b10
1076.55

b12
1333.69

| | N | P | N | P | S | A | P | R | E | L | K | E | Q | - |

y12 y11 y10 y9 y8 y7 y6   y4 y3 y2 y1

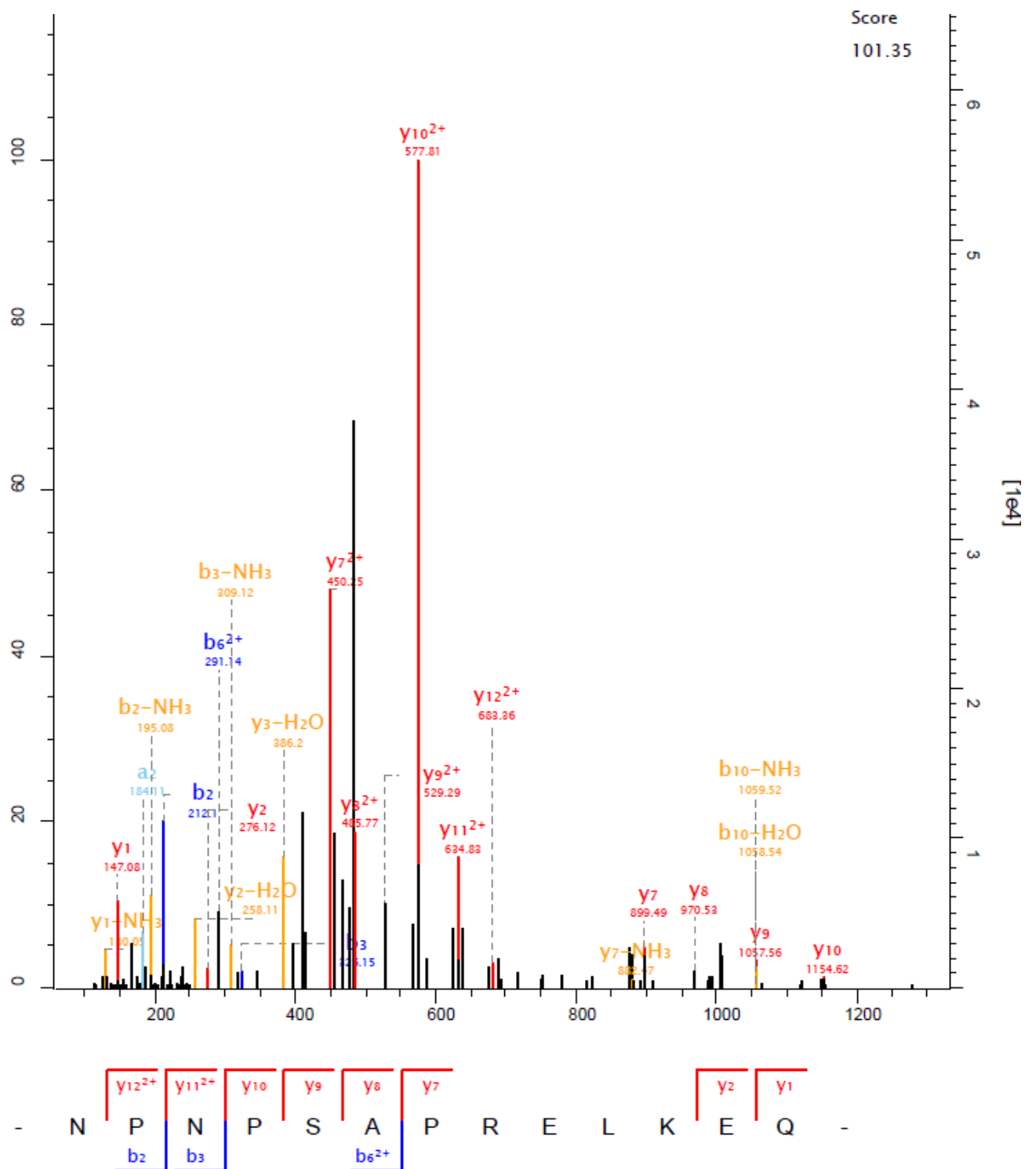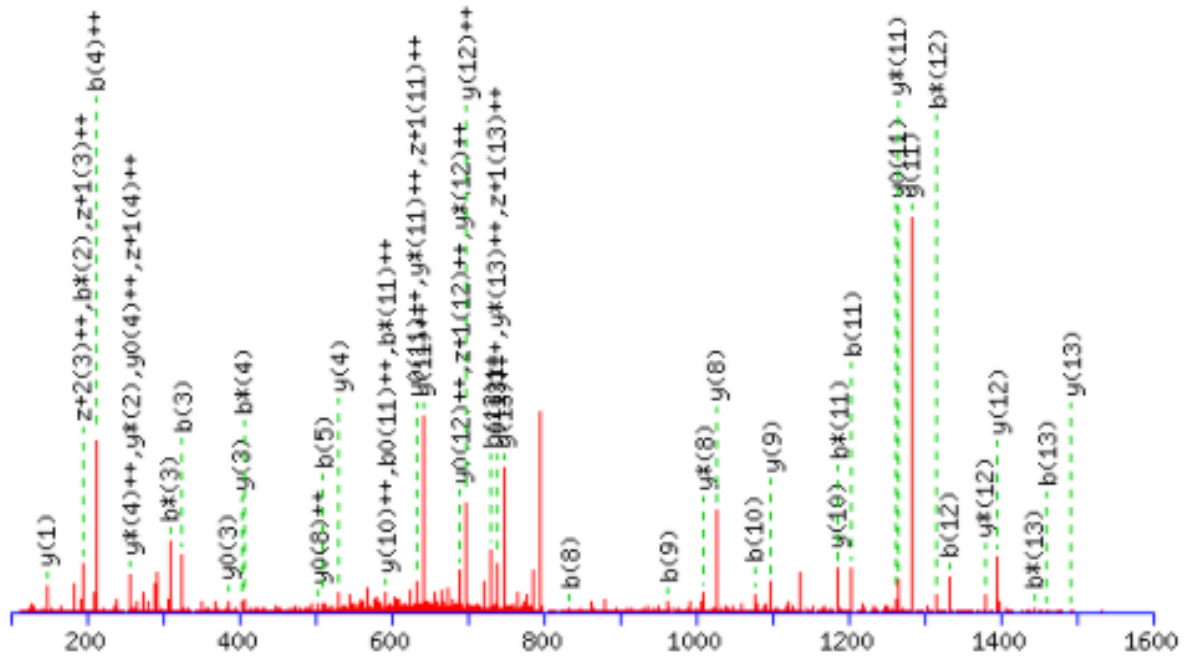b2 b3 b4 b5   b8 b9 b10 b11 b12

6

C

Fig. S3. MS/MS fragmentation spectra of the Asn408-Gln420 peptides in an overnight Arg-C digest of NPB-α2AP as determined by Mascot analysis (A) and MaxQuant analysis (B and C). Best spectrum data is shown.

A

#	b	b++	b*	b*++	b0	b0++	c	c++	Seq.	w	y	y++	y*	y*++	y0	y0++	z+1	z+1++	z+2	z+2++	#
1	115.0502	58.0287	98.0237	49.5155			132.0768	66.5420	N												14
2	212.1030	106.5551	195.0764	98.0418			229.1295	115.0684	P	1450.7285	1493.7707	747.3890	1476.7441	738.8757	1475.7601	738.3837	1477.7520	739.3796	1478.7598	739.8835	13
3	326.1459	163.5766	309.1193	155.0633			343.1724	172.0899	N	1336.6856	1396.7179	698.8626	1379.6914	690.3493	1378.7074	689.8573	1380.6992	690.8532	1381.7070	691.3571	12
4	423.1987	212.1030	406.1721	203.5897			440.2252	220.6162	P	1239.6328	1282.6750	641.8411	1265.6484	633.3279	1264.6644	632.8359	1266.6563	633.8318	1267.6641	634.3357	11
5	510.2307	255.6190	493.2041	247.1057	492.2201	246.6137	527.2572	264.1323	S	1152.6008	1185.6222	593.3148	1168.5957	584.8015	1167.6117	584.3095	1169.6035	585.3054	1170.6113	585.8093	10
6	581.2678	291.1375	564.2413	282.6243	563.2572	282.1323	598.2943	299.6508	A		1098.5902	549.7987	1081.5637	541.2855	1080.5796	540.7935	1082.5715	541.7894	1083.5793	542.2933	9
7	678.3206	339.6639	661.2940	331.1506	660.3100	330.6586	695.3471	348.1772	P	984.5109	1027.5531	514.2802	1010.5265	505.7669	1009.5425	505.2749	1011.5344	506.2708	1012.5422	506.7747	8
8	834.4217	417.7145	817.3951	409.2012	816.4111	408.7092	851.4482	426.2278	R	828.4098	930.5003	465.7538	913.4738	457.2405	912.4898	456.7485	914.4816	457.7444	915.4894	458.2483	7
9	963.4643	482.2358	946.4377	473.7225	945.4537	473.2305	980.4908	490.7490	E		774.3992	387.7032	757.3727	379.1900	756.3886	378.6980	758.3805	379.6939	759.3883	380.1978	6
10	1076.5483	538.7778	1059.5218	530.2645	1058.5378	529.7725	1093.5749	547.2911	L		645.3566	323.1819	628.3301	314.6687	627.3461	314.1767	629.3379	315.1726	630.3457	315.6765	5
11	1204.6433	602.8253	1187.6167	594.3120	1186.6327	593.8200	1221.6698	611.3386	K		532.2726	266.6399	515.2460	258.1266	514.2620	257.6346	516.2538	258.6306	517.2617	259.1345	4
12	1333.6859	667.3466	1316.6593	658.8333	1315.6753	658.3413	1350.7124	675.8599	E		404.1776	202.5924	387.1510	194.0792	386.1670	193.5872	388.1589	194.5831	389.1667	195.0870	3
13	1461.7445	731.3759	1444.7179	722.8626	1443.7339	722.3706	1478.7710	739.8891	Q		275.1350	138.0711	258.1084	129.5579			259.1163	130.0618	260.1241	130.5657	2
14									Q		147.0764	74.0418	130.0499	65.5286			131.0577	66.0325	132.0655	66.5364	1

B

Score: 55

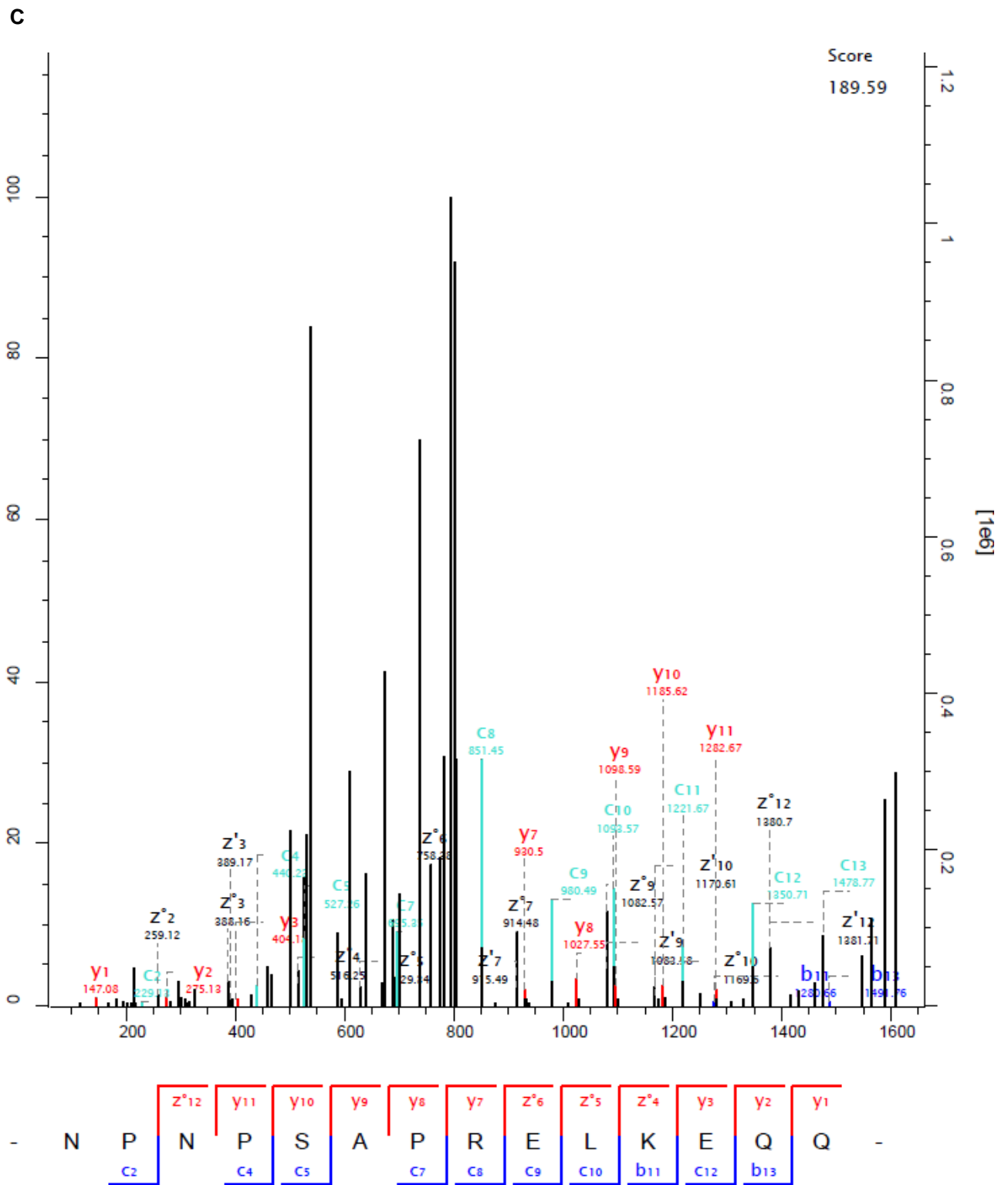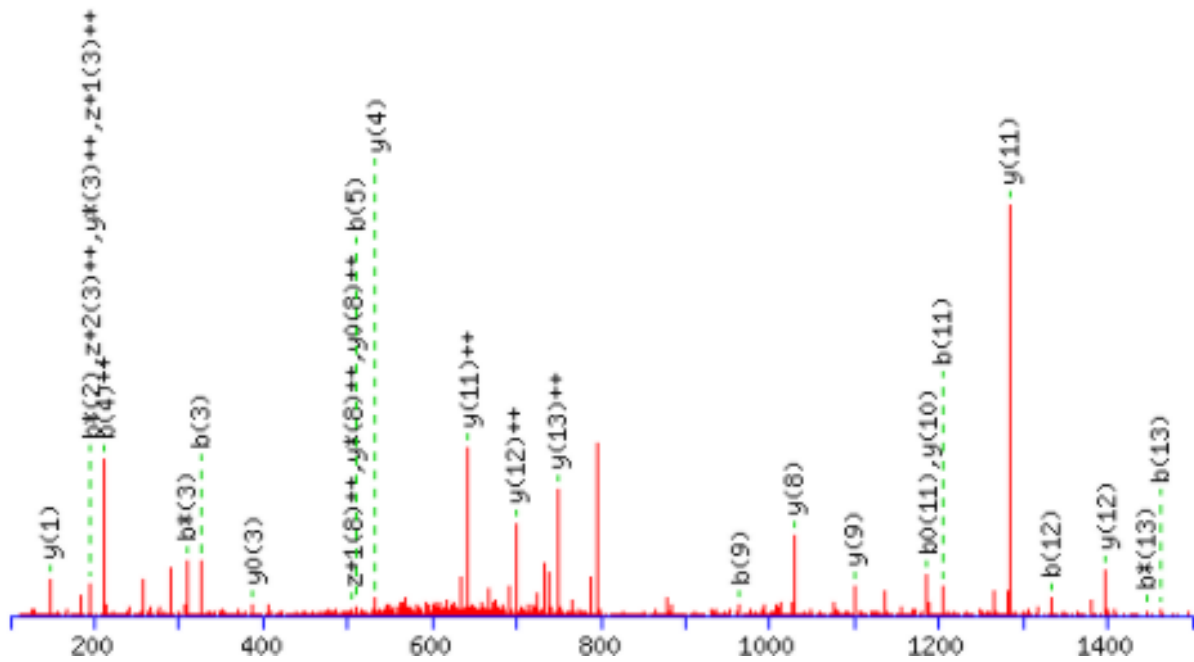| #	b	b++	b*	b*++	b0	b0++	c	c++	Seq.	w	y	y++	y*	y*++	y0	y0++	z+1	z+1++	z+2	z+2++	#
1	115.0502	58.0287	98.0237	49.5155			132.0768	66.5420	N												14
2	212.1030	106.5551	195.0764	98.0418			229.1295	115.0684	P	1450.7285	1493.7707	747.3890	1476.7441	738.8757	1475.7601	738.3837	1477.7520	739.3796	1478.7598	739.8835	13
3	326.1459	163.5766	309.1193	155.0633			343.1724	172.0899	N	1336.6856	1396.7179	698.8626	1379.6914	690.3493	1378.7074	689.8573	1380.6992	690.8532	1381.7070	691.3571	12
4	423.1987	212.1030	406.1721	203.5897			440.2252	220.6162	P	1239.6328	1282.6750	641.8411	1265.6484	633.3279	1264.6644	632.8359	1266.6563	633.8318	1267.6641	634.3357	11
5	510.2307	255.6190	493.2041	247.1057	492.2201	246.6137	527.2572	264.1323	S	1152.6008	1185.6222	593.3148	1168.5957	584.8015	1167.6117	584.3095	1169.6035	585.3054	1170.6113	585.8093	10
6	581.2678	291.1375	564.2413	282.6243	563.2572	282.1323	598.2943	299.6508	A		1098.5902	549.7987	1081.5637	541.2855	1080.5796	540.7935	1082.5715	541.7894	1083.5793	542.2933	9
7	678.3206	339.6639	661.2940	331.1506	660.3100	330.6586	695.3471	348.1772	P	984.5109	1027.5531	514.2802	1010.5265	505.7669	1009.5425	505.2749	1011.5344	506.2708	1012.5422	506.7747	8
8	834.4217	417.7145	817.3951	409.2012	816.4111	408.7092	851.4482	426.2278	R	828.4098	930.5003	465.7538	913.4738	457.2405	912.4898	456.7485	914.4816	457.7444	915.4894	458.2483	7
9	963.4643	482.2358	946.4377	473.7225	945.4537	473.2305	980.4908	490.7490	E		774.3992	387.7032	757.3727	379.1900	756.3886	378.6980	758.3805	379.6939	759.3883	380.1978	6
10	1076.5483	538.7778	1059.5218	530.2645	1058.5378	529.7725	1093.5749	547.2911	L		645.3566	323.1819	628.3301	314.6687	627.3461	314.1767	629.3379	315.1726	630.3457	315.6765	5
11	1204.6433	602.8253	1187.6167	594.3120	1186.6327	593.8200	1221.6698	611.3386	K		532.2726	266.6399	515.2460	258.1266	514.2620	257.6346	516.2538	258.6306	517.2617	259.1345	4
12	1333.6859	667.3466	1316.6593	658.8333	1315.6753	658.3413	1350.7124	675.8599	E		404.1776	202.5924	387.1510	194.0792	386.1670	193.5872	388.1589	194.5831	389.1667	195.0870	3
13	1461.7445	731.3759	1444.7179	722.8626	1443.7339	722.3706	1478.7710	739.8891	Q		275.1350	138.0711	258.1084	129.5579			259.1163	130.0618	260.1241	130.5657	2
14									Q		147.0764	74.0418	130.0499	65.5286			131.0577	66.0325	132.0655	66.5364	1

9

C

Fig. S4. MS/MS fragmentation spectra of the Asn408-Gln421 peptides in an overnight Arg-C digest of NPB-α2AP as determined by Mascot analysis (A and B) and MaxQuant analysis (C). Best spectrum data is shown.
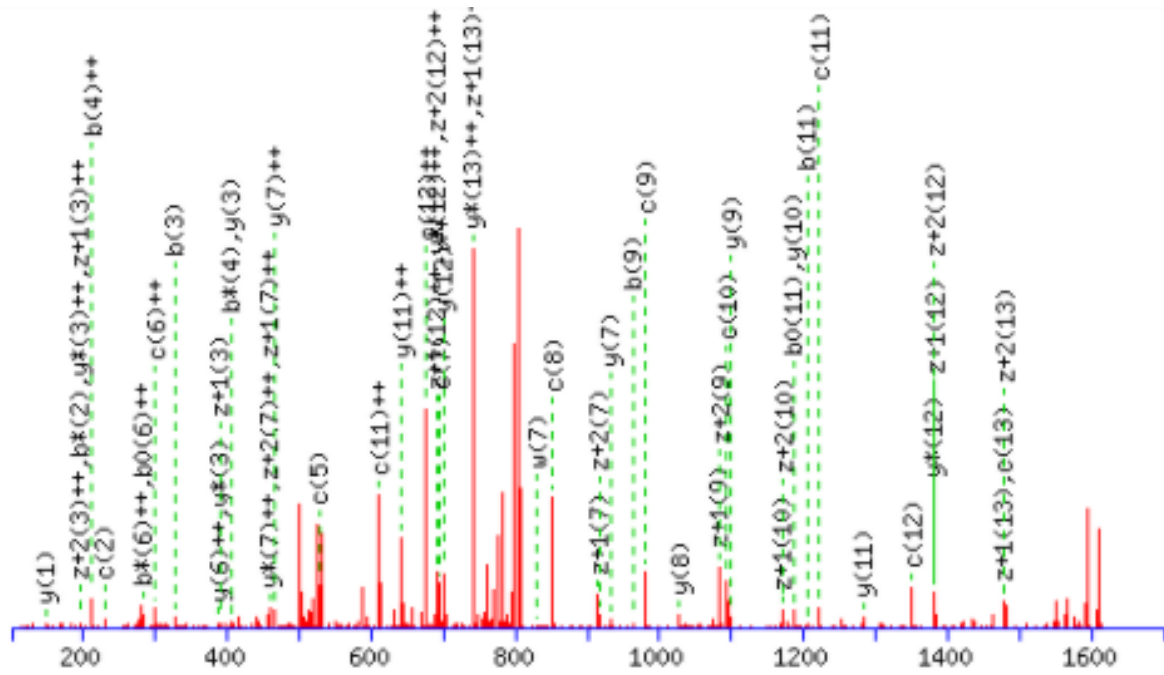
A

#	b	b++	b*	b*++	b0	b0++	c	c++	Seq.	w	y	y++	y*	y*++	y0	y0++	z+1	z+1++	z+2	z+2++	#
1	115.0502	58.0287	98.0237	49.5155			132.0768	66.5420	N												14
2	212.1030	106.5551	195.0764	98.0418			229.1295	115.0684	P	1451.7125	1494.7547	747.8810	1477.7281	739.3677	1476.7441	738.8757	1478.7360	739.8716	1479.7438	740.3755	13
3	326.1459	163.5766	309.1193	155.0633			343.1724	172.0899	N	1337.6696	1397.7019	699.3546	1380.6754	690.8413	1379.6914	690.3493	1381.6832	691.3452	1382.6910	691.8492	12
4	423.1987	212.1030	406.1721	203.5897			440.2252	220.6162	P	1240.6168	1283.6590	642.3331	1266.6325	633.8199	1265.6484	633.3279	1267.6403	634.3238	1268.6481	634.8277	11
5	510.2307	255.6190	493.2041	247.1057	492.2201	246.6137	527.2572	264.1323	S	1153.5848	1186.6062	593.8068	1169.5797	585.2935	1168.5957	584.8015	1170.5875	585.7974	1171.5953	586.3013	10
6	581.2678	291.1375	564.2413	282.6243	563.2572	282.1323	598.2943	299.6508	A		1099.5742	550.2907	1082.5477	541.7775	1081.5637	541.2855	1083.5555	542.2814	1084.5633	542.7853	9
7	678.3206	339.6639	661.2940	331.1506	660.3100	330.6586	695.3471	348.1772	P	985.4949	1028.5371	514.7722	1011.5106	506.2589	1010.5265	505.7669	1012.5184	506.7628	1013.5262	507.2667	8
8	834.4217	417.7145	817.3951	409.2012	816.4111	408.7092	851.4482	426.2278	R	829.3938	931.4843	466.2458	914.4578	457.7325	913.4738	457.2405	915.4656	458.2364	916.4734	458.7404	7
9	963.4643	482.2358	946.4377	473.7225	945.4537	473.2305	980.4908	490.7490	E		775.3832	388.1953	758.3567	379.6820	757.3727	379.1900	759.3645	380.1859	760.3723	380.6898	6
10	1076.5483	538.7778	1059.5218	530.2645	1058.5378	529.7725	1093.5749	547.2911	L		646.3406	323.6740	629.3141	315.1607	628.3301	314.6687	630.3219	315.6646	631.3297	316.1685	5
11	1204.6433	602.8253	1187.6167	594.3120	1186.6327	593.8200	1221.6698	611.3386	K		533.2566	267.1319	516.2300	258.6186	515.2460	258.1266	517.2378	259.1226	518.2457	259.6265	4
12	1333.6859	667.3466	1316.6593	658.8333	1315.6753	658.3413	1350.7124	675.8599	E		405.1616	203.0844	388.1351	194.5712	387.1510	194.0792	389.1429	195.0751	390.1507	195.5790	3
13	1462.7285	731.8679	1445.7019	723.3546	1444.7179	722.8626	1479.7550	740.3812	Q		276.1190	138.5631	259.0925	130.0499			260.1003	130.5538	261.1081	131.0577	2
14									Q		147.0764	74.0418	130.0499	65.5286			131.0577	66.0325	132.0655	66.5364	1

11

B

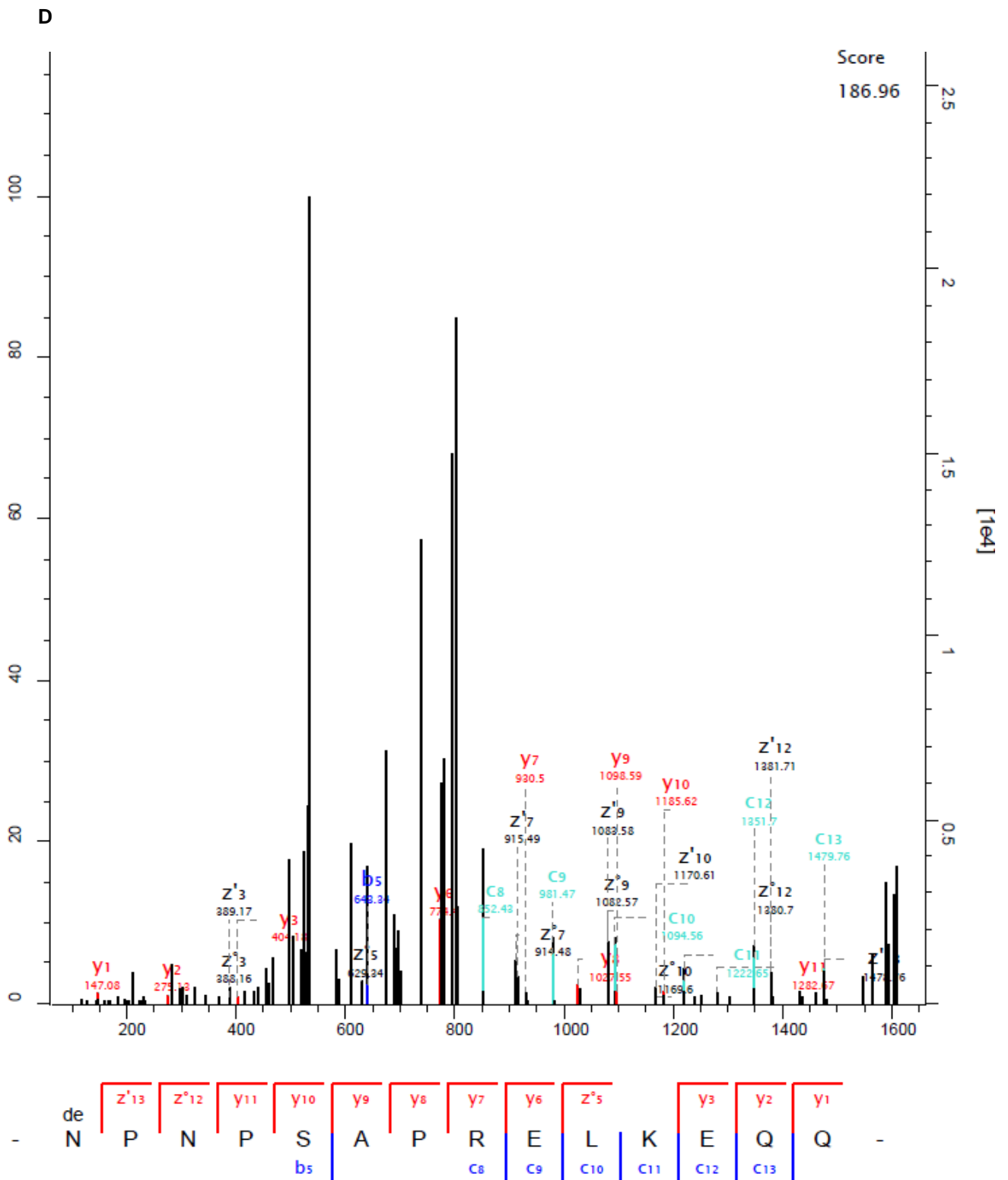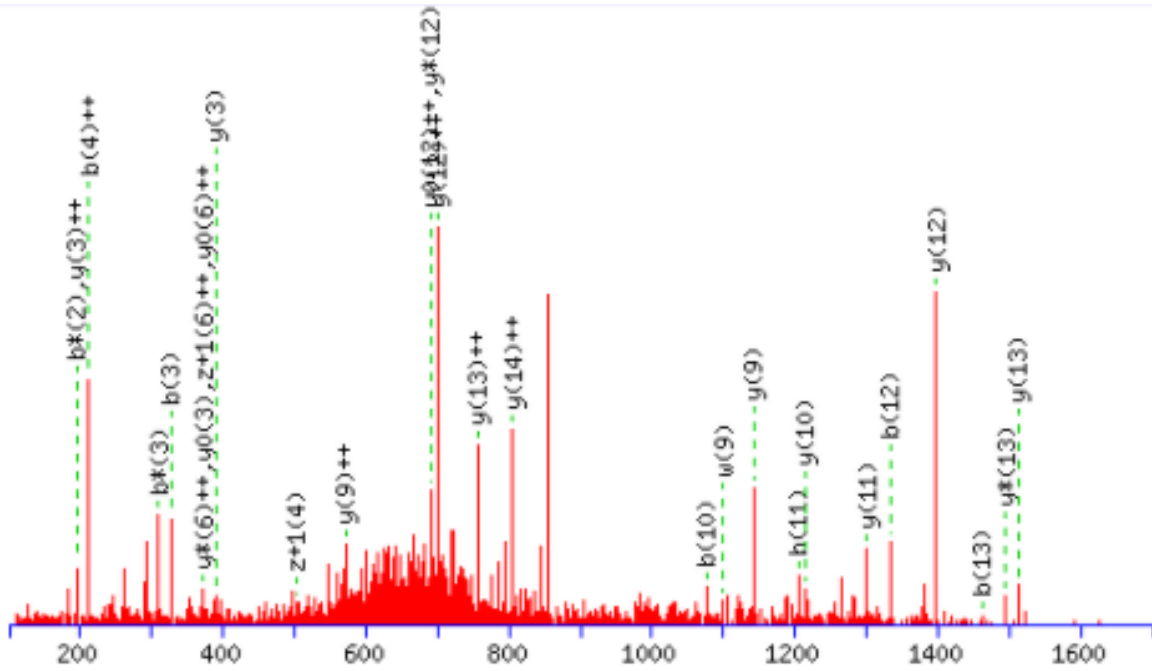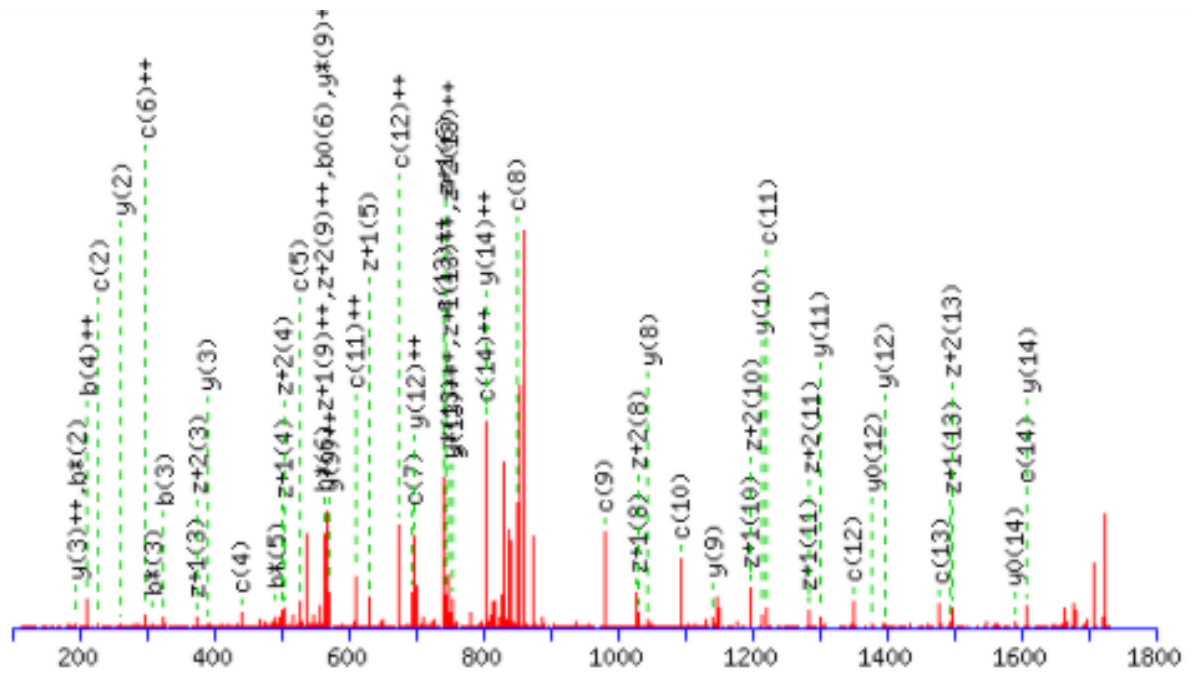| #	b	b++	b*	b*++	b0	b0++	c	c++	Seq.	w	y	y++	y*	y*++	y0	y0++	z+1	z+1++	z+2	z+2++	#
1	115.0502	58.0287	98.0237	49.5155			132.0768	66.5420	N												14
2	212.1030	106.5551	195.0764	98.0418			229.1295	115.0684	P	1451.7125	1494.7547	747.8810	1477.7281	739.3677	1476.7441	738.8757	1478.7360	739.8716	1479.7438	740.3755	13
3	326.1459	163.5766	309.1193	155.0633			343.1724	172.0899	N	1337.6696	1397.7019	699.3546	1380.6754	690.8413	1379.6914	690.3493	1381.6832	691.3452	1382.6910	691.8492	12
4	423.1987	212.1030	406.1721	203.5897			440.2252	220.6162	P	1240.6168	1283.6590	642.3331	1266.6325	633.8199	1265.6484	633.3279	1267.6403	634.3238	1268.6481	634.8277	11
5	510.2307	255.6190	493.2041	247.1057	492.2201	246.6137	527.2572	264.1323	S	1153.5848	1186.6062	593.8068	1169.5797	585.2935	1168.5957	584.8015	1170.5875	585.7974	1171.5953	586.3013	10
6	581.2678	291.1375	564.2413	282.6243	563.2572	282.1323	598.2943	299.6508	A		1099.5742	550.2907	1082.5477	541.7775	1081.5637	541.2855	1083.5555	542.2814	1084.5633	542.7853	9
7	678.3206	339.6639	661.2940	331.1506	660.3100	330.6586	695.3471	348.1772	P	985.4949	1028.5371	514.7722	1011.5106	506.2589	1010.5265	505.7669	1012.5184	506.7628	1013.5262	507.2667	8
8	834.4217	417.7145	817.3951	409.2012	816.4111	408.7092	851.4482	426.2278	R	829.3938	931.4843	466.2458	914.4578	457.7325	913.4738	457.2405	915.4656	458.2364	916.4734	458.7404	7
9	963.4643	482.2358	946.4377	473.7225	945.4537	473.2305	980.4908	490.7490	E		775.3832	388.1953	758.3567	379.6820	757.3727	379.1900	759.3645	380.1859	760.3723	380.6898	6
10	1076.5483	538.7778	1059.5218	530.2645	1058.5378	529.7725	1093.5749	547.2911	L		646.3406	323.6740	629.3141	315.1607	628.3301	314.6687	630.3219	315.6646	631.3297	316.1685	5
11	1204.6433	602.8253	1187.6167	594.3120	1186.6327	593.8200	1221.6698	611.3386	K		533.2566	267.1319	516.2300	258.6186	515.2460	258.1266	517.2378	259.1226	518.2457	259.6265	4
12	1333.6859	667.3466	1316.6593	658.8333	1315.6753	658.3413	1350.7124	675.8599	E		405.1616	203.0844	388.1351	194.5712	387.1510	194.0792	389.1429	195.0751	390.1507	195.5790	3
13	1461.7445	731.3759	1444.7179	722.8626	1443.7339	722.3706	1478.7710	739.8891	Q		276.1190	138.5631	259.0925	130.0499			260.1003	130.5538	261.1081	131.0577	2
14									Q		148.0604	74.5339	131.0339	66.0206			132.0417	66.5245	133.0495	67.0284	1

12

c

Fig. S5. MS/MS fragmentation spectra of the deamidated Asn408-Gln421 peptides in an overnight Arg-C digest of NPB-α2AP as determined by Mascot analysis (A and B) and MaxQuant analysis (C and D). Best spectrum data is shown.
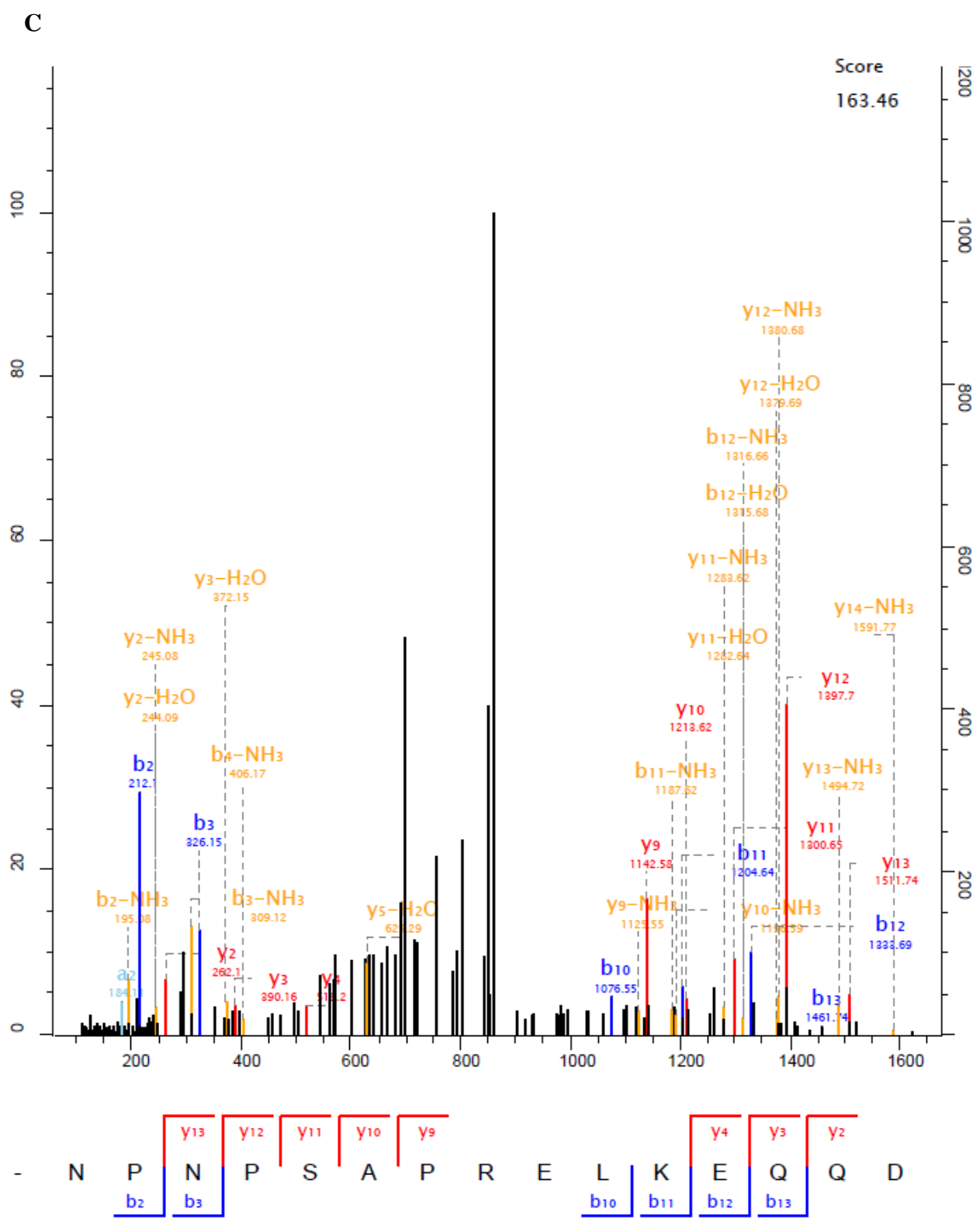
A

Score: 33

#	b	b++	b*	b*++	b0	b0++	c	c++	Seq.	w	y	y++	y*	y*++	y0	y0++	z+1	z+1++	z+2	z+2++	#
1	115.0502	58.0287	98.0237	49.5155			132.0768	66.5420	N												15
2	212.1030	106.5551	195.0764	98.0418			229.1295	115.0684	P	1565.7554	1608.7976	804.9025	1591.7711	796.3892	1590.7871	795.8972	1592.7789	796.8931	1593.7867	797.3970	14
3	326.1459	163.5766	309.1193	155.0633			343.1724	172.0899	N	1451.7125	1511.7449	756.3761	1494.7183	747.8628	1493.7343	747.3708	1495.7261	748.3667	1496.7340	748.8706	13
4	423.1987	212.1030	406.1721	203.5897			440.2252	220.6162	P	1354.6597	1397.7019	699.3546	1380.6754	690.8413	1379.6914	690.3493	1381.6832	691.3452	1382.6910	691.8492	12
5	510.2307	255.6190	493.2041	247.1057	492.2201	246.6137	527.2572	264.1323	S	1267.6277	1300.6492	650.8282	1283.6226	642.3149	1282.6386	641.8229	1284.6304	642.8189	1285.6383	643.3228	11
6	581.2678	291.1375	564.2413	282.6243	563.2572	282.1323	598.2943	299.6508	A		1213.6171	607.3122	1196.5906	598.7989	1195.6066	598.3069	1197.5984	599.3028	1198.6062	599.8068	10
7	678.3206	339.6639	661.2940	331.1506	660.3100	330.6586	695.3471	348.1772	P	1099.5378	1142.5800	571.7937	1125.5535	563.2804	1124.5695	562.7884	1126.5613	563.7843	1127.5691	564.2882	9
8	834.4217	417.7145	817.3951	409.2012	816.4111	408.7092	851.4482	426.2278	R	943.4367	1045.5273	523.2673	1028.5007	514.7540	1027.5167	514.2620	1029.5085	515.2579	1030.5164	515.7618	8
9	963.4643	482.2358	946.4377	473.7225	945.4537	473.2305	980.4908	490.7490	E		889.4262	445.2167	872.3996	436.7034	871.4156	436.2114	873.4074	437.2074	874.4153	437.7113	7
10	1076.5483	538.7778	1059.5218	530.2645	1058.5378	529.7725	1093.5749	547.2911	L	760.3836	760.3836	380.6954	743.3570	372.1821	742.3730	371.6901	744.3648	372.6861	745.3727	373.1900	6
11	1204.6433	602.8253	1187.6167	594.3120	1186.6327	593.8200	1221.6698	611.3386	K		647.2995	324.1534	630.2729	315.6401	629.2889	315.1481	631.2808	316.1440	632.2886	316.6479	5
12	1333.6859	667.3466	1316.6593	658.8333	1315.6753	658.3413	1350.7124	675.8599	E		519.2045	260.1059	502.1780	251.5926	501.1940	251.1006	503.1858	252.0965	504.1936	252.6005	4
13	1461.7445	731.3759	1444.7179	722.8626	1443.7339	722.3706	1478.7710	739.8891	Q		390.1619	195.5846	373.1354	187.0713	372.1514	186.5793	374.1432	187.5752	375.1510	188.0792	3
14	1589.8030	795.4052	1572.7765	786.8919	1571.7925	786.3999	1606.8296	803.9184	Q		262.1034	131.5553	245.0768	123.0420	244.0928	122.5500	246.0846	123.5460	247.0925	124.0499	2
15									D		134.0448	67.5260					116.0342	58.5207	118.0261	59.5167	119.0339	60.0206	1

15

B

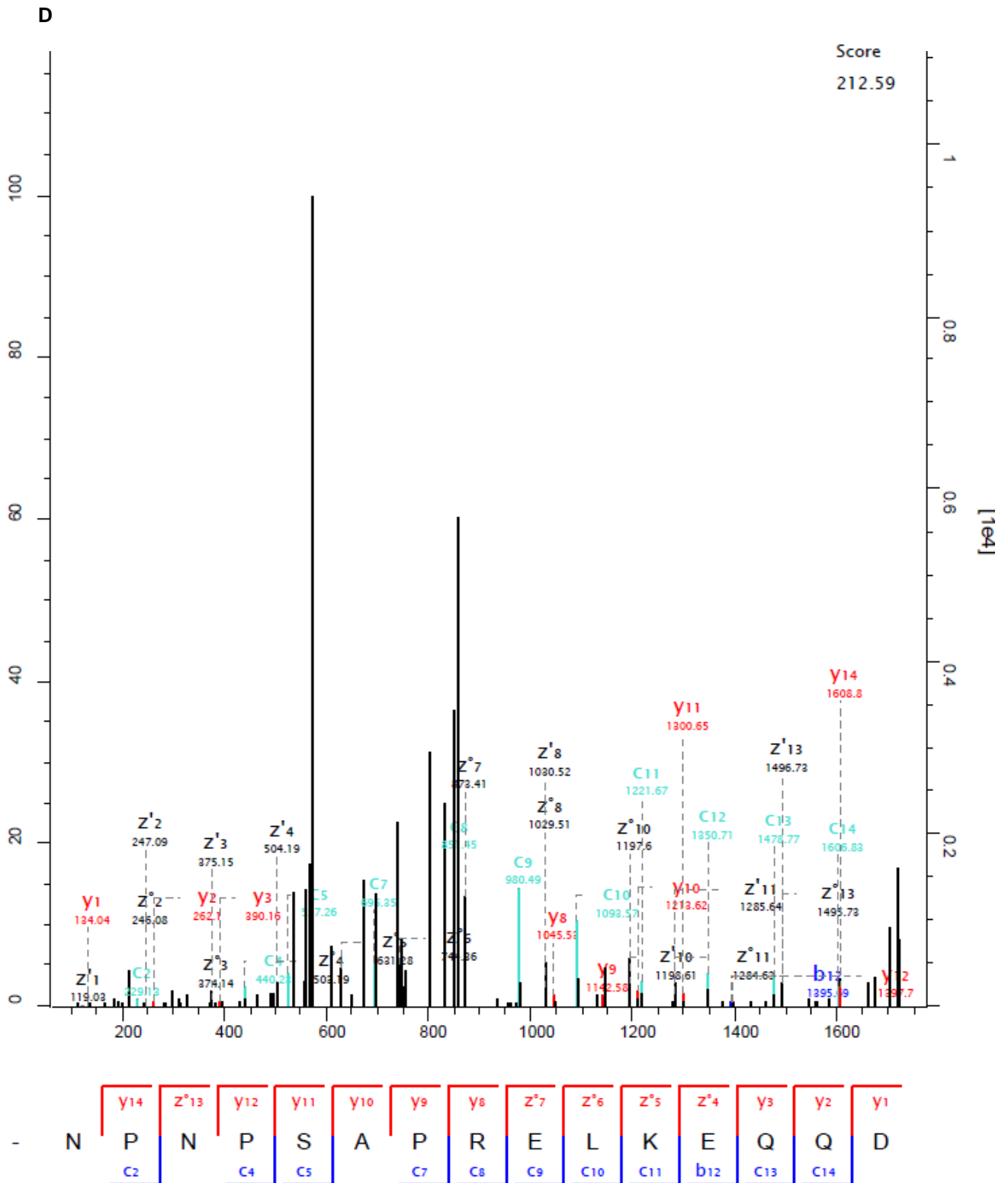| #	b	b++	b*	b*++	b0	b0++	c	c++	Seq.	w	y	y++	y*	y*++	y0	y0++	z+1	z+1++	z+2	z+2++	#
1	115.0502	58.0287	98.0237	49.5155			132.0768	66.5420	N												15
2	212.1030	106.5551	195.0764	98.0418			229.1295	115.0684	P	1565.7554	1608.7976	804.9025	1591.7711	796.3892	1590.7871	795.8972	1592.7789	796.8931	1593.7867	797.3970	14
3	326.1459	163.5766	309.1193	155.0633			343.1724	172.0899	N	1451.7125	1511.7449	756.3761	1494.7183	747.8628	1493.7343	747.3708	1495.7261	748.3667	1496.7340	748.8706	13
4	423.1987	212.1030	406.1721	203.5897	492.2201	246.6137	440.2252	220.6162	P	1354.6597	1397.7019	699.3546	1380.6754	690.8413	1379.6914	690.3493	1381.6832	691.3452	1382.6910	691.8492	12
5	510.2307	255.6190	493.2041	247.1057			527.2572	264.1323	S	1267.6277	1300.6492	650.8282	1283.6226	642.3149	1282.6386	641.8229	1284.6304	642.8189	1285.6383	643.3228	11
6	581.2678	291.1375	564.2413	282.6243	563.2572	282.1323	598.2943	299.6508	A		1213.6171	607.3122	1196.5906	598.7989	1195.6066	598.3069	1197.5984	599.3028	1198.6062	599.8068	10
7	678.3206	339.6639	661.2940	331.1506	660.3100	330.6586	695.3471	348.1772	P	1099.5378	1142.5800	571.7937	1125.5535	563.2804	1124.5695	562.7884	1126.5613	563.7843	1127.5691	564.2882	9
8	834.4217	417.7145	817.3951	409.2012	816.4111	408.7092	851.4482	426.2278	R	943.4367	1045.5273	523.2673	1028.5007	514.7540	1027.5167	514.2620	1029.5085	515.2579	1030.5164	515.7618	8
9	963.4643	482.2358	946.4377	473.7225	945.4537	473.2305	980.4908	490.7490	E		889.4262	445.2167	872.3996	436.7034	871.4156	436.2114	873.4074	437.2074	874.4153	437.7113	7
10	1076.5483	538.7778	1059.5218	530.2645	1058.5378	529.7725	1093.5749	547.2911	L		760.3836	380.6954	743.3570	372.1821	742.3730	371.6901	744.3648	372.6861	745.3727	373.1900	6
11	1204.6433	602.8253	1187.6167	594.3120	1186.6327	593.8200	1221.6698	611.3386	K		647.2995	324.1534	630.2729	315.6401	629.2889	315.1481	631.2808	316.1440	632.2886	316.6479	5
12	1333.6859	667.3466	1316.6593	658.8333	1315.6753	658.3413	1350.7124	675.8599	E		519.2045	260.1059	502.1780	251.5926	501.1940	251.1006	503.1858	252.0965	504.1936	252.6005	4
13	1461.7445	731.3759	1444.7179	722.8626	1443.7339	722.3706	1478.7710	739.8891	Q		390.1619	195.5846	373.1354	187.0713	372.1514	186.5793	374.1432	187.5752	375.1510	188.0792	3
14	1589.8030	795.4052	1572.7765	786.8919	1571.7925	786.3999	1606.8296	803.9184	Q		262.1034	131.5553	245.0768	123.0420	244.0928	122.5500	246.0846	123.5460	247.0925	124.0499	2
15									D		134.0448	67.5260			116.0342	58.5207	118.0261	59.5167	119.0339	60.0206	1

Fig. S6. MS/MS fragmentation spectra of the Asn408-Asp422 peptides in an overnight Arg-C digest of NPB-α2AP as determined by Mascot analysis (A and B) and MaxQuant analysis (C and D). Best spectrum data is shown.