

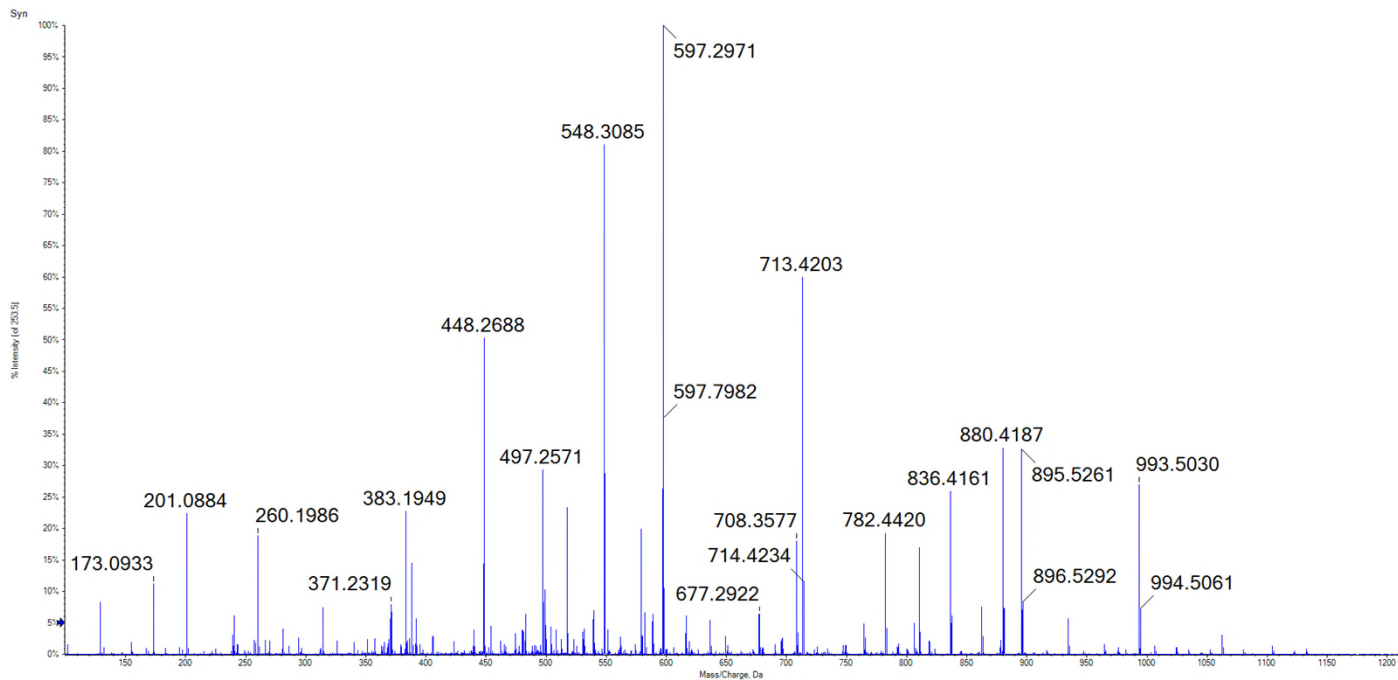
N	Sequence	AN	rt IMAC	rt Synt	Ratio	N	Sequence	AN	rt IMAC	rt Synt	Ratio
1	AEL[pS]PVEQKL	Q9Y5P8	60.1	55.6	1.1	44	REIES[pS]PQYRL	Q8WWW7	48.9	46.1	1.1
2	REL[pS]PQRNL	Q96F44	37.1	35.3	1.1	45	REY[pS]PPYAP	Q9UPT8	51.3	48.0	1.1
3	TER[pS]PGPRL	O14978	30.1	30.5	1.0	46	KEKEV[pS]QEL	A8MX76	33.9	33.3	1.0
4	IES[pS]PQYRL	Q8WWW7	52.9	49.8	1.1	47	KEL[pS]PPPGL	Q724S6	62.5	57.2	1.1
5	KEKDF[pS]PEAL	O15372	51.1	47.6	1.1	48	RER[pS]PSPSF	P49585	31.3	31.4	1.0
6	GEW[pS]ASLPHRF	O43164	70.8	64.5	1.1	49	GET[pS]LMRTL	O96017	70.7	64.5	1.1
7	SEA[pS]PSREAI	Q13111	33.6	33.5	1.0	50	AEK[pS]PGPIV	Q86WB0	39.5	38.0	1.0
8	YEG[pS]PIKVTL	P06748	72.4	66.2	1.1	51	REN[pS]PVQSI	Q72Z21	35.7	35.0	1.0
9	HERSI[pS]PLL	Q9UBT6	57.3	53.1	1.1	52	RET[pS]PNRIGL	Q72460	42.6	40.4	1.1
10	VEKKIR[pS]L	O75394	18.2	19.9	0.9	53	REG[pS]FRVTTA	P49757	38.4	36.9	1.0
11	AEN[pS]PTRQQF	Q86XP3	32.8	33.0	1.0	54	PEV[pS]PRPAL	Q96L73	50.5	47.4	1.1
12	QEV[pT]PSRSTL	P49454	38.5	37.4	1.0	55	KEL[pS]PAGSI	O95453	46.5	44.0	1.1
13	RE[pS]PPPSAL	Q86VE0	37.5	36.5	1.0	56	REG[pS]YDRYL	Q9HCD5	48.8	46.0	1.1
14	REK[pT]PSEDKL	Q8NFC6	20.6	22.4	0.9	57	S[pS]YGNIRAV	Q8N122	47.9	45.4	1.1
15	GEDR[pS]PPTAL	Q9BUB5	40.9	39.6	1.0	58	GEPHS[pS]PEL	Q9NUA8	35.8	33.8	1.1
16	REV[pS]PAPAVA	O60292	34.9	34.2	1.0	59	REK[pS]PGRMLST	O14578	27.6	28.2	1.0
17	KEV[pT]PKPVL	P17544	43.0	40.8	1.1	60	SEL[pS]PGRSV	Q8NFF5	39.8	38.4	1.0
18	HEL[pS]PPQKRM	Q9BXP5	30.5	30.5	1.0	61	HEFS[pS]PSHL	Q9H3D4	39.8	38.1	1.0
19	RE[pT]PSPRPM	Q9UQ35	26.7	27.7	1.0	62	QEK[pS]PEERL	Q7RTP6	26.4	27.5	1.0
20	REYG[pS]PLKA	Q9UQ88	33.7	33.2	1.0	63	KEQ[pS]PEPHL	Q5VV52	33.4	33.2	1.0
21	KEM[pS]PTRQL	Q4G0N7	33.9	33.3	1.0	64	NEA[pS]PVKRPRL	Q9H8U3	34.4	33.2	1.0
22	GENK[pS]PLLL	Q8IZD2	62.6	57.7	1.1	65	G[pS]FSRFYSL	P22695	82.0	72.7	1.1
23	VEFPH[pS]PEI	Q9BR61	68.0	62.0	1.1	66	REF[pS]KEPEL	Q9NQS7	49.8	46.6	1.1
24	YEKAN[pT]PEL	Q9H8V3	40.3	39.1	1.0	67	SEKPV[pS]PKSGTL	Q14155	34.3	33.5	1.0
25	VEK[pS]PRPPL	Q7L590	37.2	35.4	1.1	68	REL[pS]PLISL	P51825	89.3	80.0	1.1
26	QEK[pS]PKQAL	O43683	22.2	24.0	0.9	69	RE[pT]PVPPAM	Q9Y2F5	28.9	29.8	1.0
27	GEI[pS]PQREV	Q8WWW1	41.8	40.1	1.0	70	REP[pS]PSSSSL	O60336	34.8	34.1	1.0
28	HEFH[pS]QENL	Q9Y3M8	32.6	32.4	1.0	71	LEKRT[pS]PQVL	Q72417	37.3	35.4	1.1
29	REG[pS]GRFSL	P57764	46.5	43.9	1.1	72	REL[pS]GTIKEI	P30050	54.9	51.0	1.1
30	GEN[pS]GIGKL	Q6P0N0	44.4	42.4	1.0	73	GEA[pS]PSHII	Q9ULL5-3	51.2	47.9	1.1
31	SEI[pS]PIKGSV	Q7Z5K2	53.4	50.0	1.1	74	GEQ[pS]PNVSL	Q58WW2	50.0	47.7	1.0
32	SEK[pS]LENETL	P23588	46.5	44.2	1.1	75	KE[pT]PDKVEL	Q13610	40.6	38.7	1.0
33	RED[pS]QRRGAHL	Q32P51	24.0	25.3	0.9	76	NEFH[pS]PIGL	Q06413	67.7	61.7	1.1
34	RED[pS]GTFSL	O75569	59.6	55.4	1.1	77	REV[pS]PEPIV	Q8N103	51.7	48.5	1.1
35	REA[pS]PSRLSV	O75122	37.4	35.4	1.1	78	NEK[pS]PYASL	Q6IQ21	45.0	43.1	1.0
36	SEQ[pS]LGQKL	P33991	43.9	42.1	1.0	79	REL[pS]GTIKEIL	P30050	78.0	68.9	1.1
37	REV[pS]PAPAV	O60292	36.3	35.2	1.0	80	SERIMQL[pS]L	Q81Y63	83.2	73.8	1.1
38	SERM[pS]LPLL	Q15398	91.2	81.7	1.1	81	R[pS]FPPTLPTL	Q13761	88.4	79.1	1.1
39	SES[pS]PPKAM	Q9UHB6	28.5	29.4	1.0	82	KES[pS]PIPSP	Q01082	39.0	37.6	1.0
40	SEV[pS]PSGVGF	Q6ULP2	65.3	60.1	1.1	83	SE[pS]GSNLHAL	Q6P4F7	43.8	42.0	1.0
41	REK[pS]PGRML	O14578	25.5	26.6	1.0	84	KELARQI[pS]F	Q9Y385	54.2	50.3	1.1
42	SEF[pS]DVKL	O75665	70.3	63.8	1.1	85	KEN[pT]PPAL	P31350	38.7	37.4	1.0
43	REA[pS]PLSSNKL	Q9Y462	40.2	38.3	1.0						

Supplementary data S2. MS2 spectra of the identified phosphopeptides. Each candidate spectrum is compared with the fragmentation spectrum of the indicated synthetic peptide. Red dots represent ion peaks that are not present in both spectra. The retention times of each natural peptide in the IMAC fraction (rt IMAC) and of the corresponding synthetic peptide (rt Sint) are shown. The ratio rt IMAC / rt Sint is also indicated.

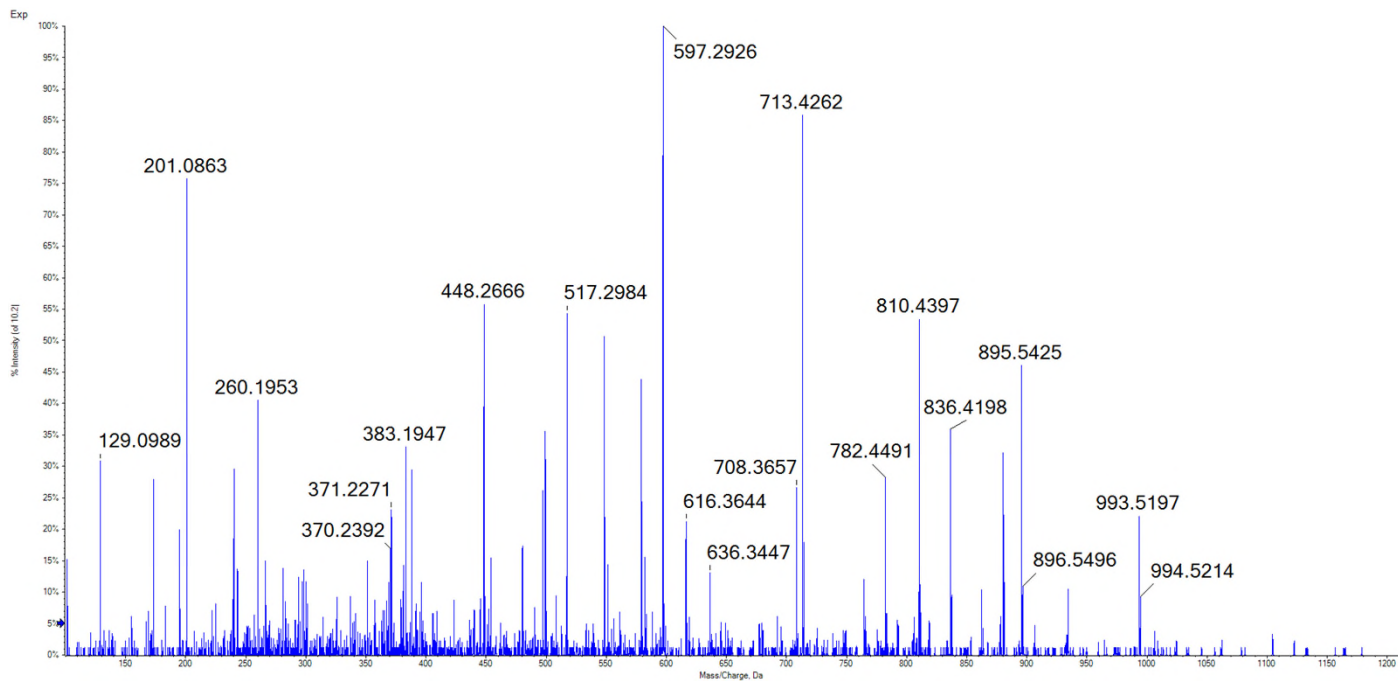
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AEL(pS)PVEQKL

Synthetic
Peptide



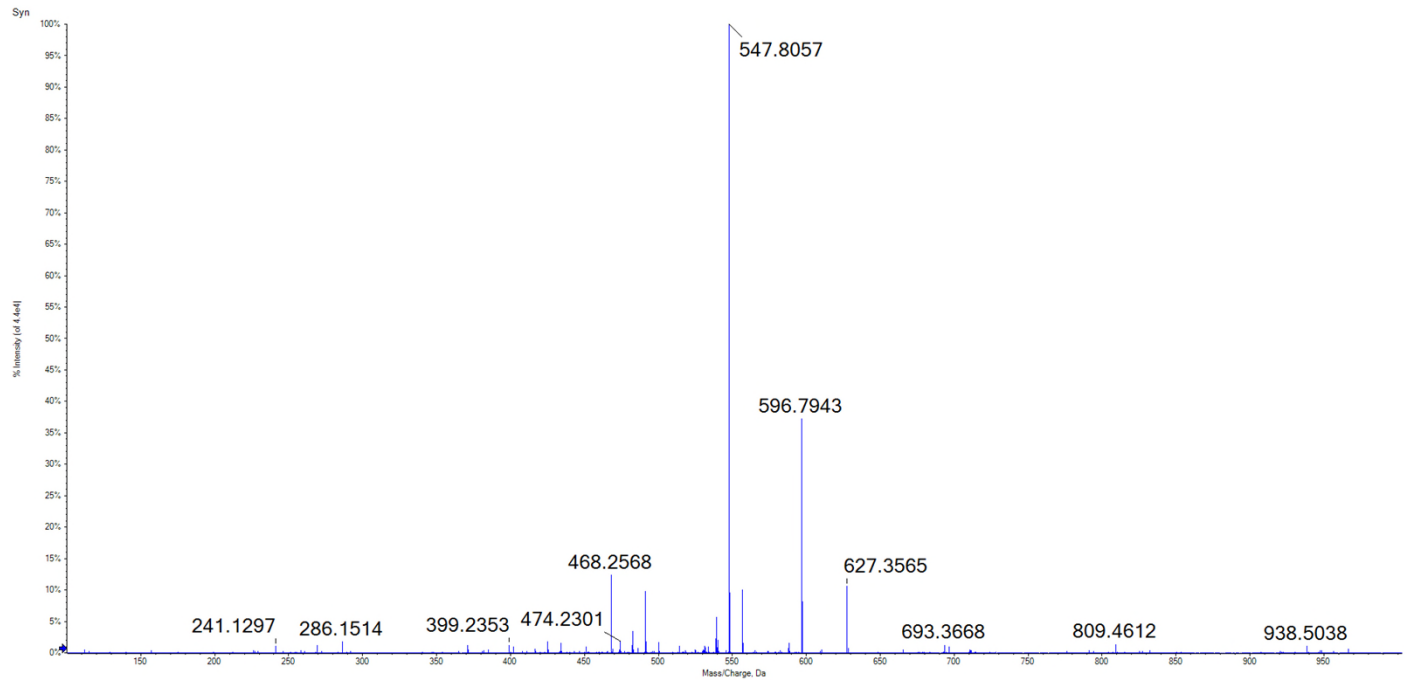
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Spectrum



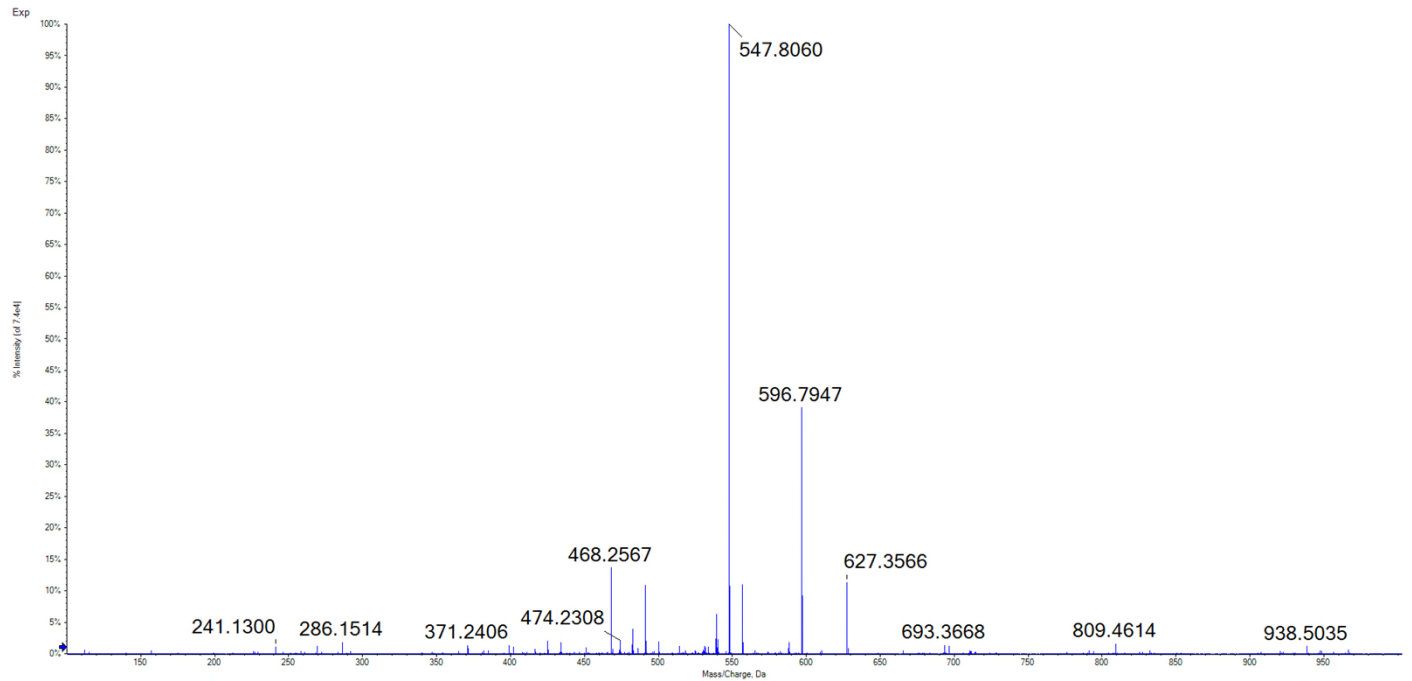
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REL(pS)PQRNL

Synthetic
Peptide



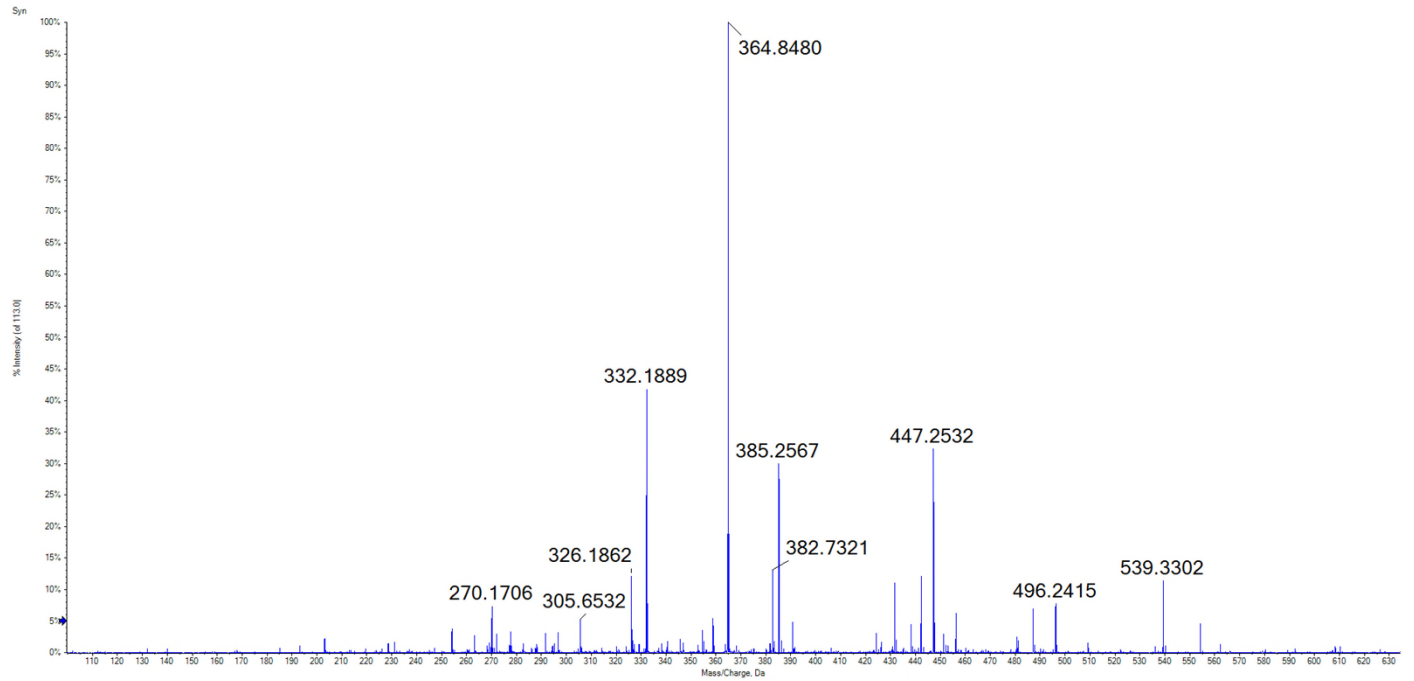
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Spectrum



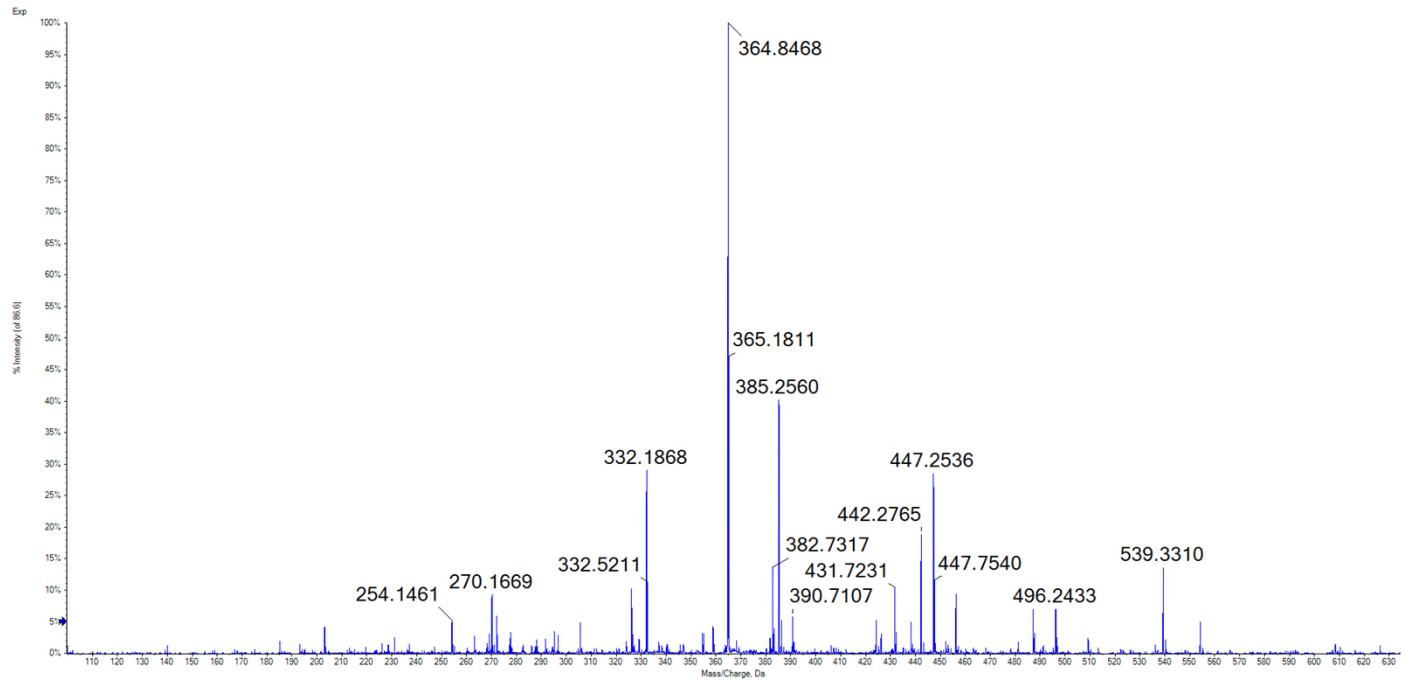
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TER(pS)PGPRL

Synthetic
Peptide



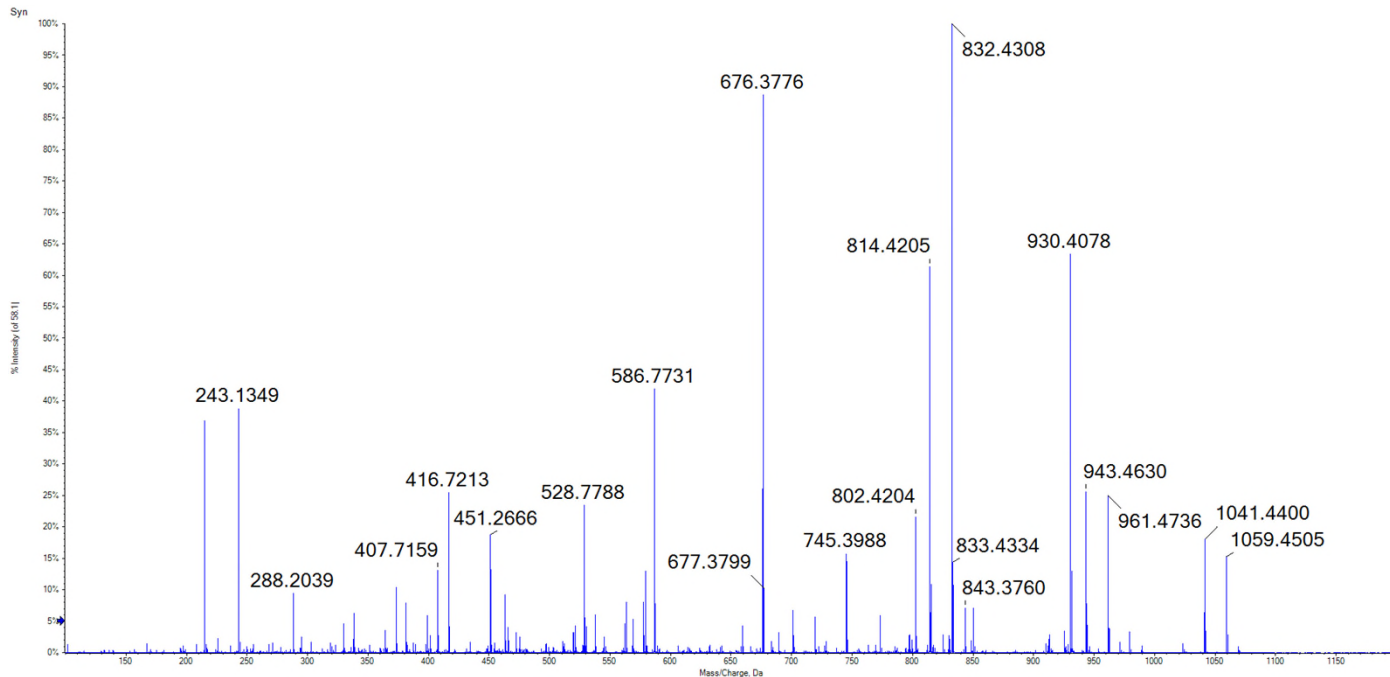
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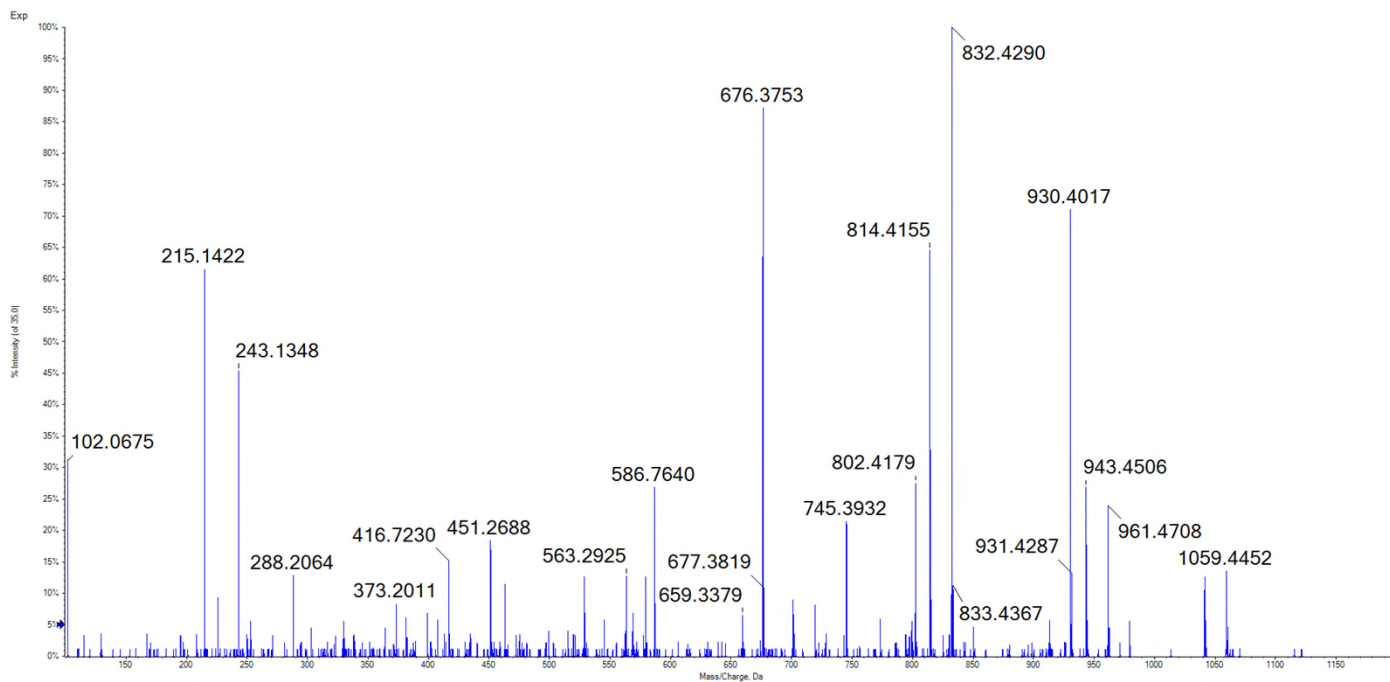
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IES(pS)PQYRL

Synthetic Peptide



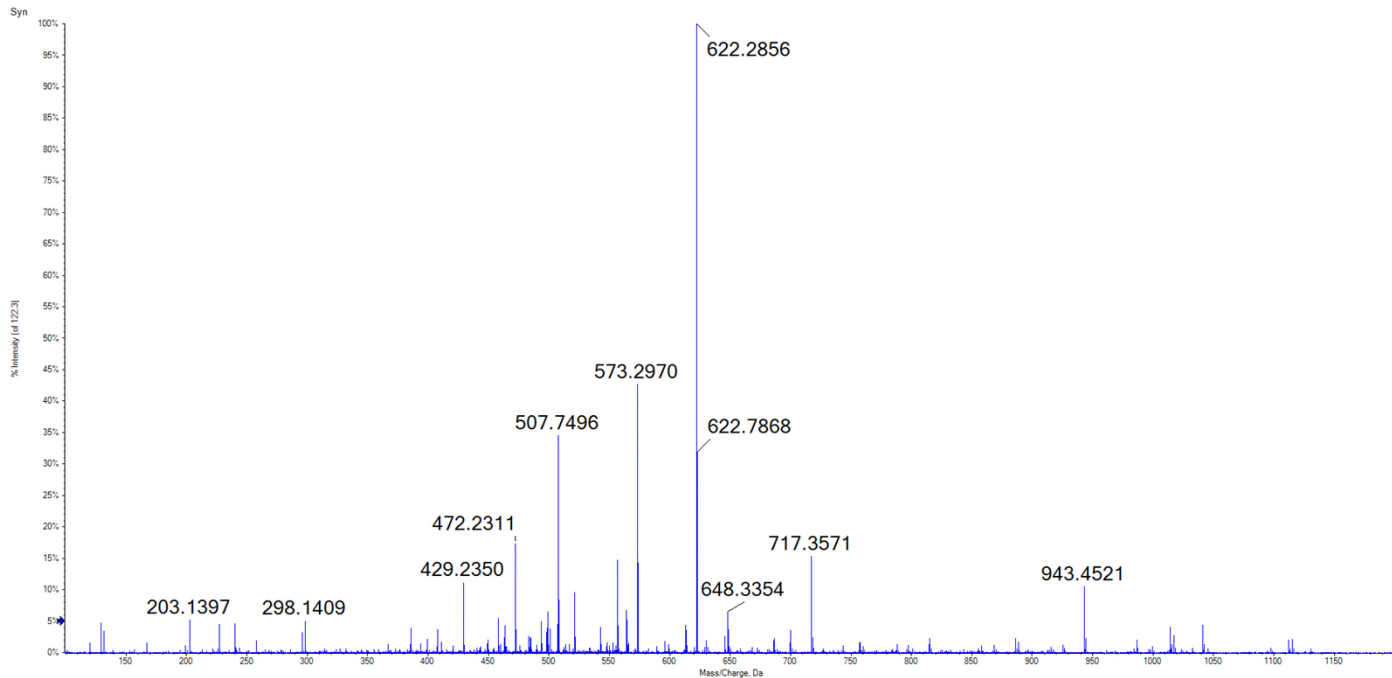
Candidate Spectrum



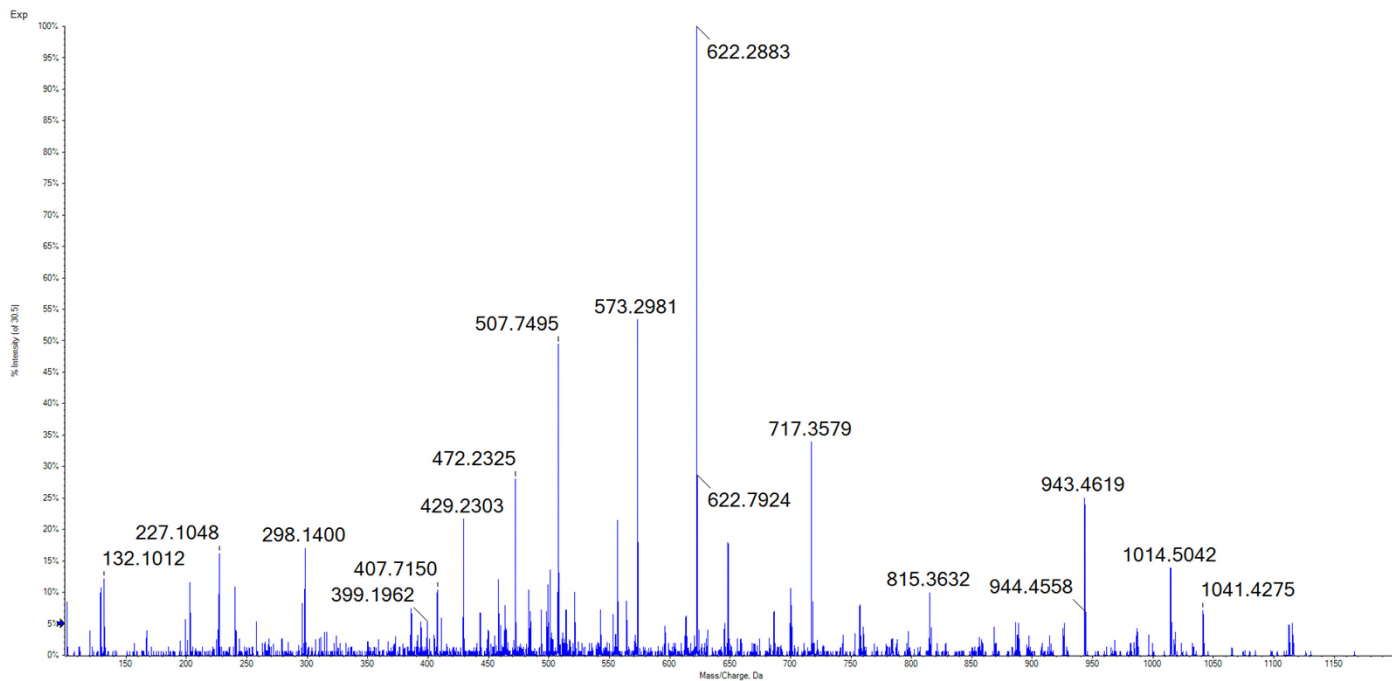
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KEKDF(pS)PEAL

Synthetic
Peptide



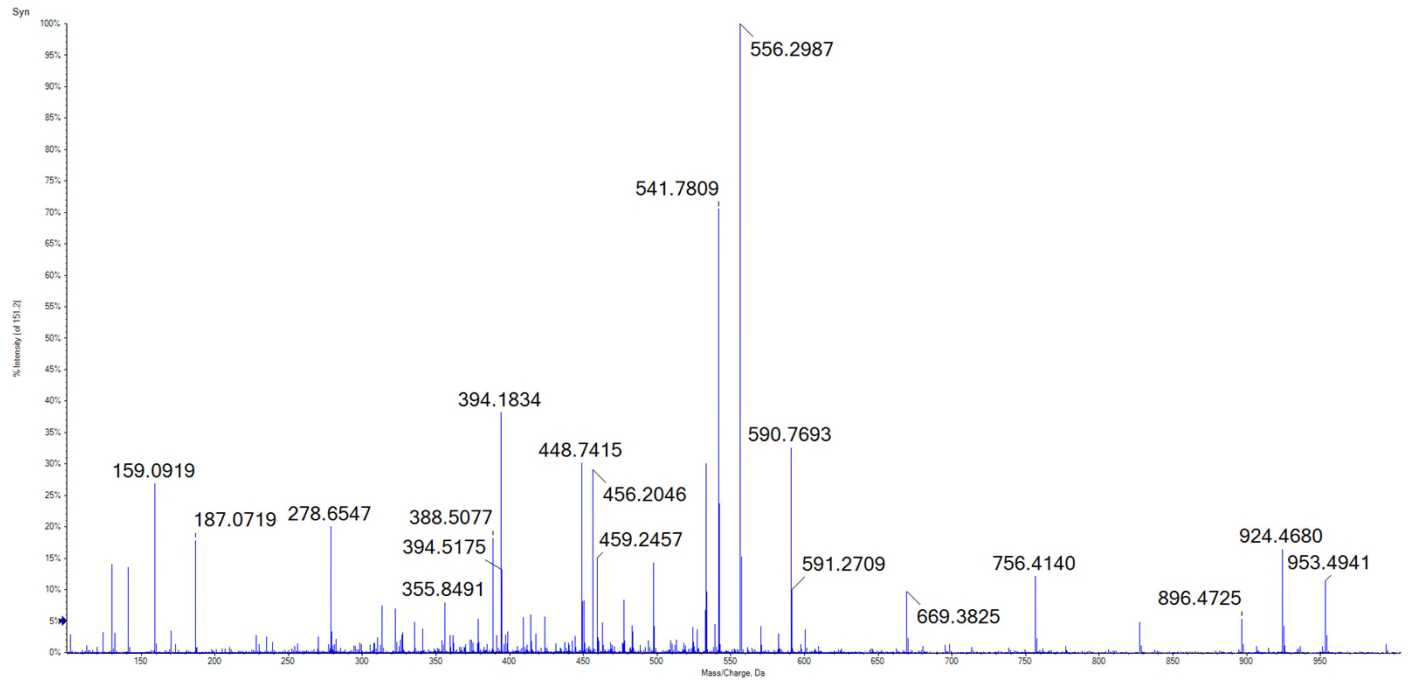
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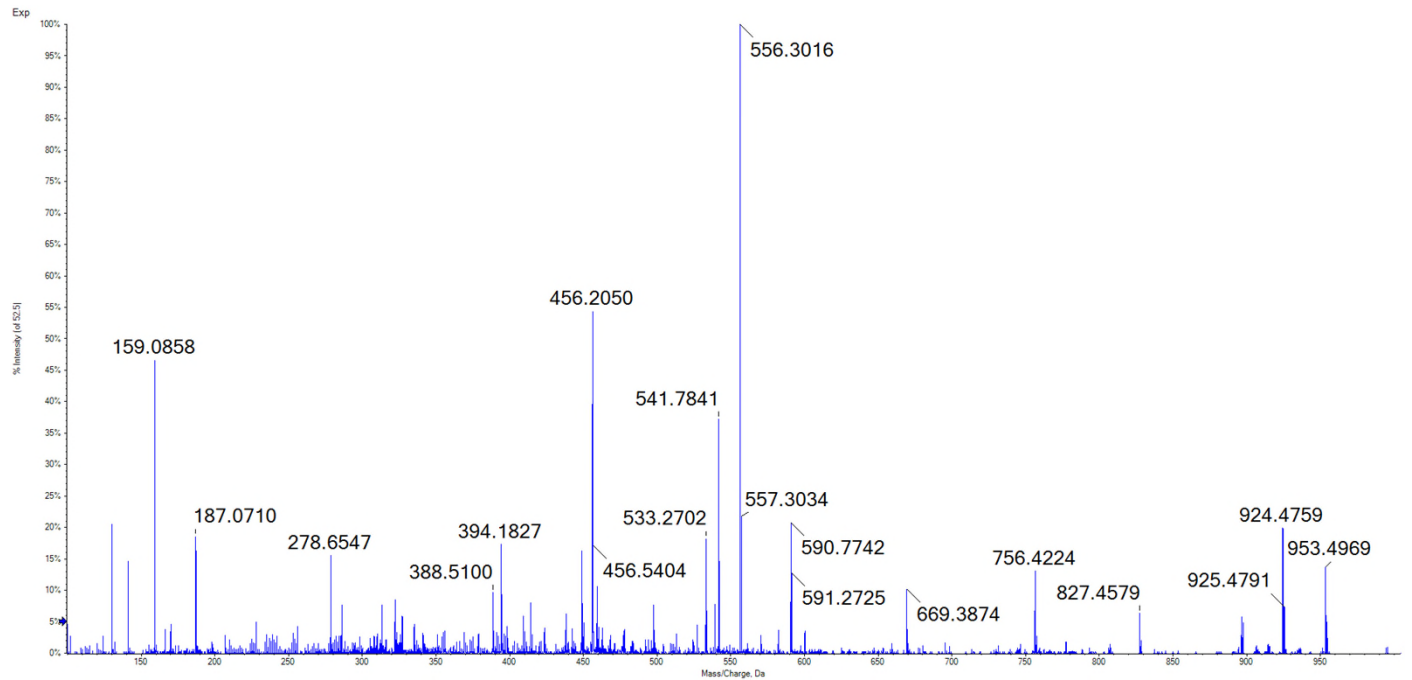
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GEW(pS)ASLPHRF

Synthetic
Peptide



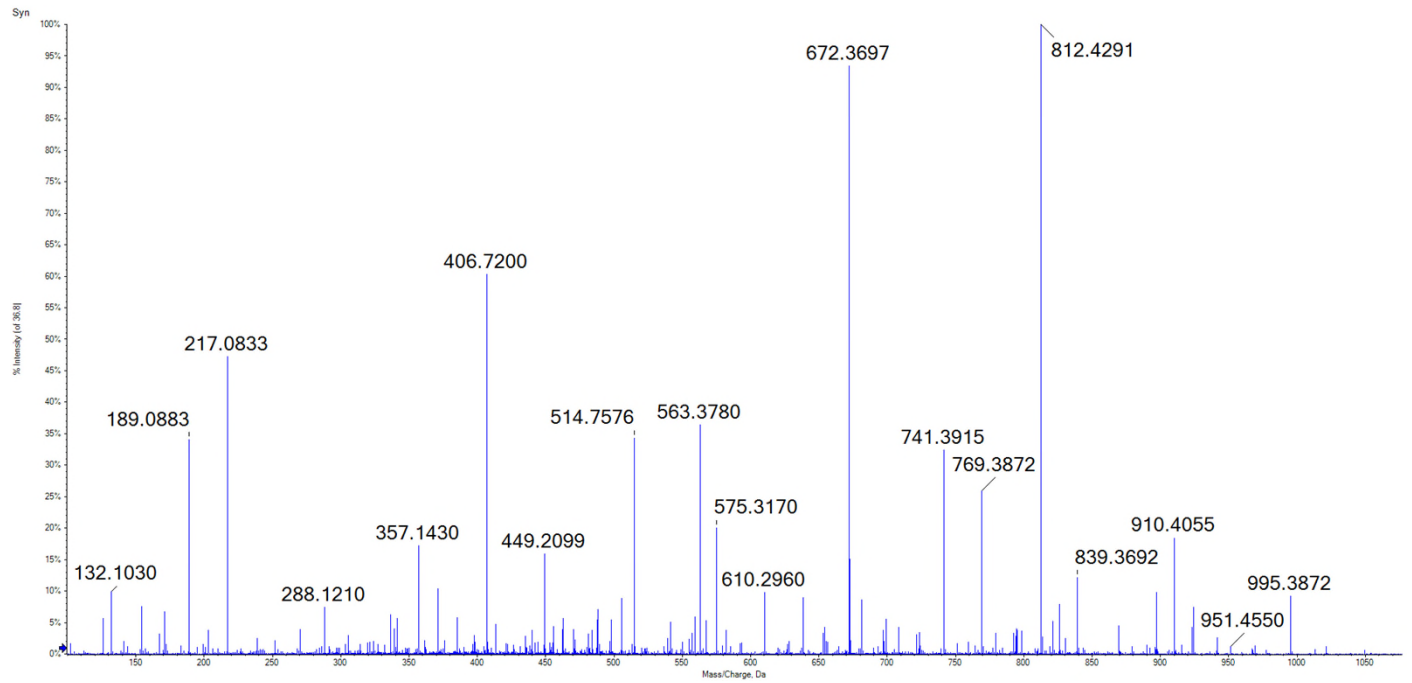
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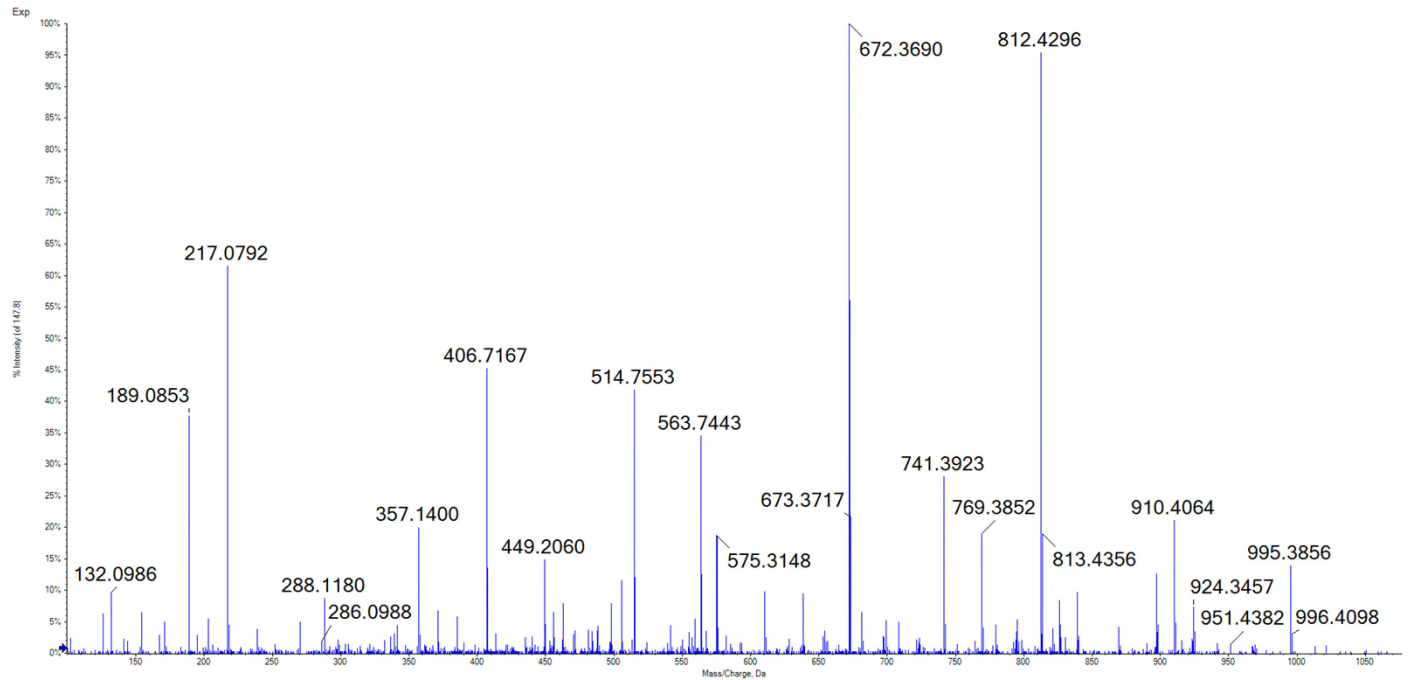
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SEA(pS)PSREALI

Synthetic
Peptide



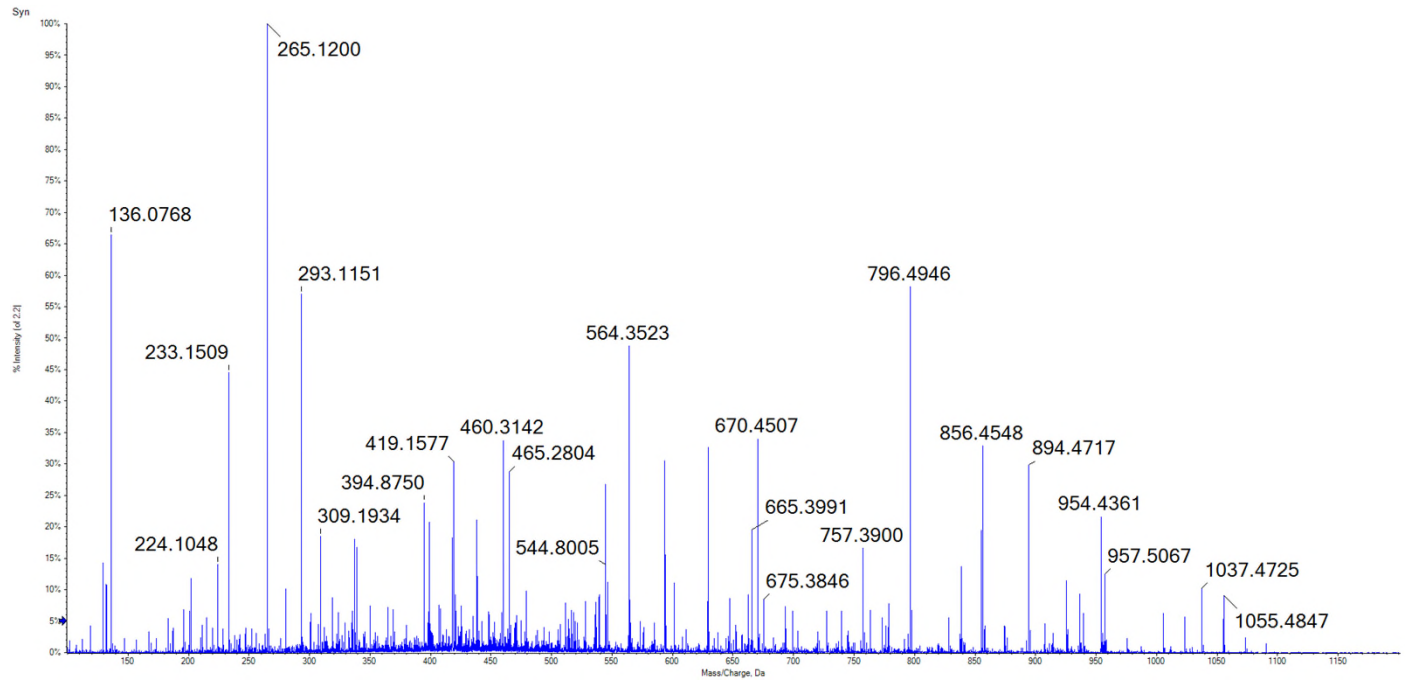
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Spectrum



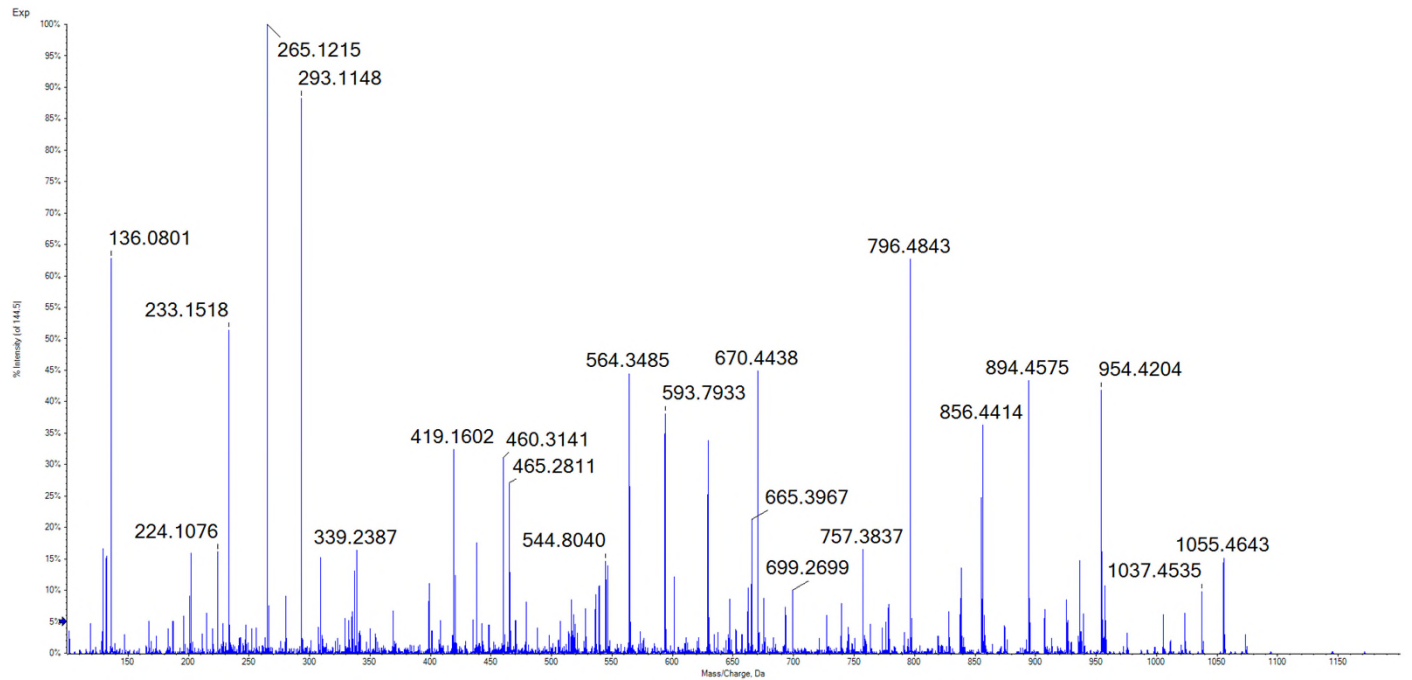
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YEG(pS)PIKVTL

Synthetic
Peptide



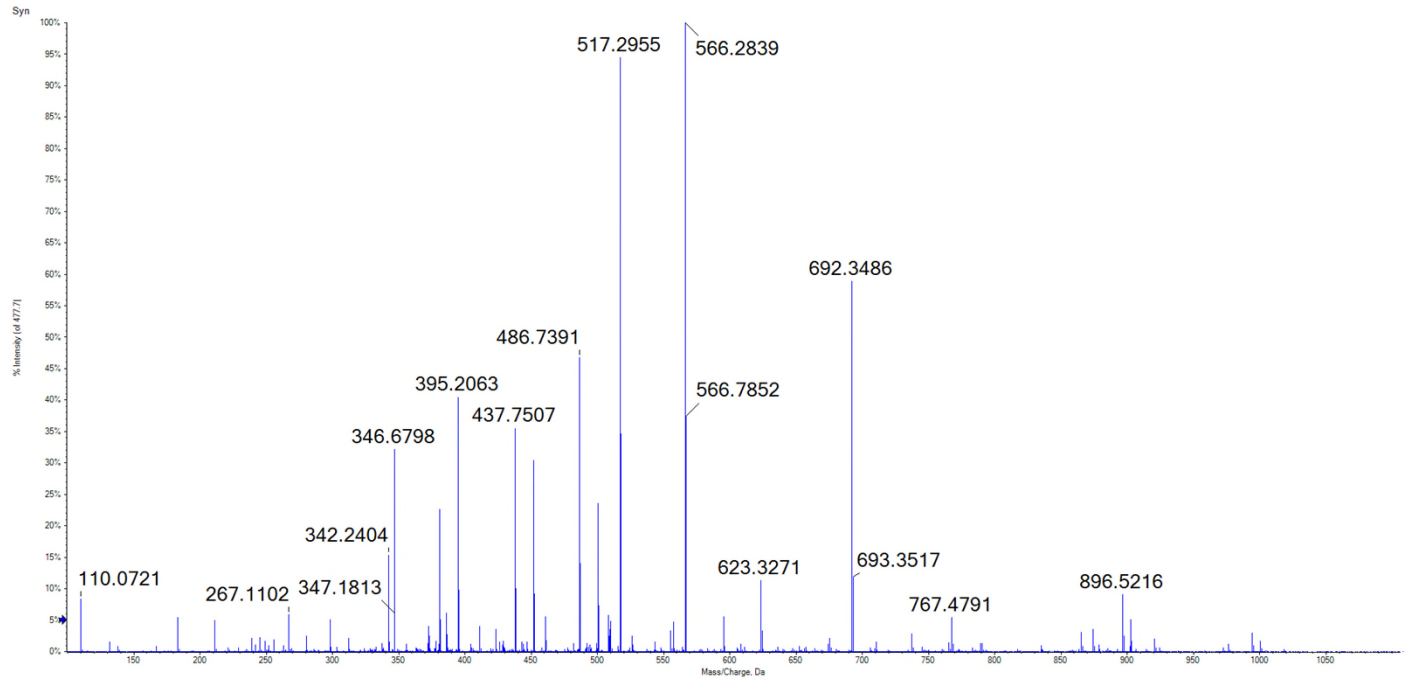
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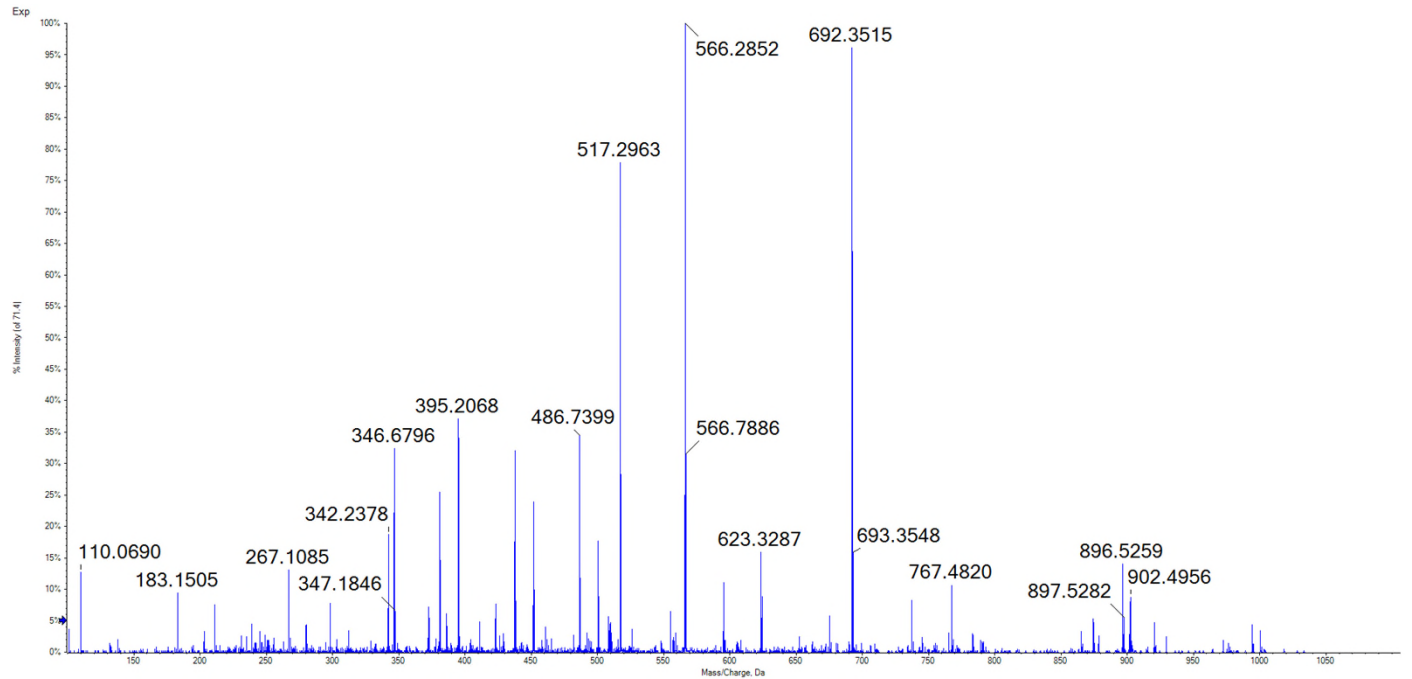
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HERSI(pS)PLL

Synthetic Peptide



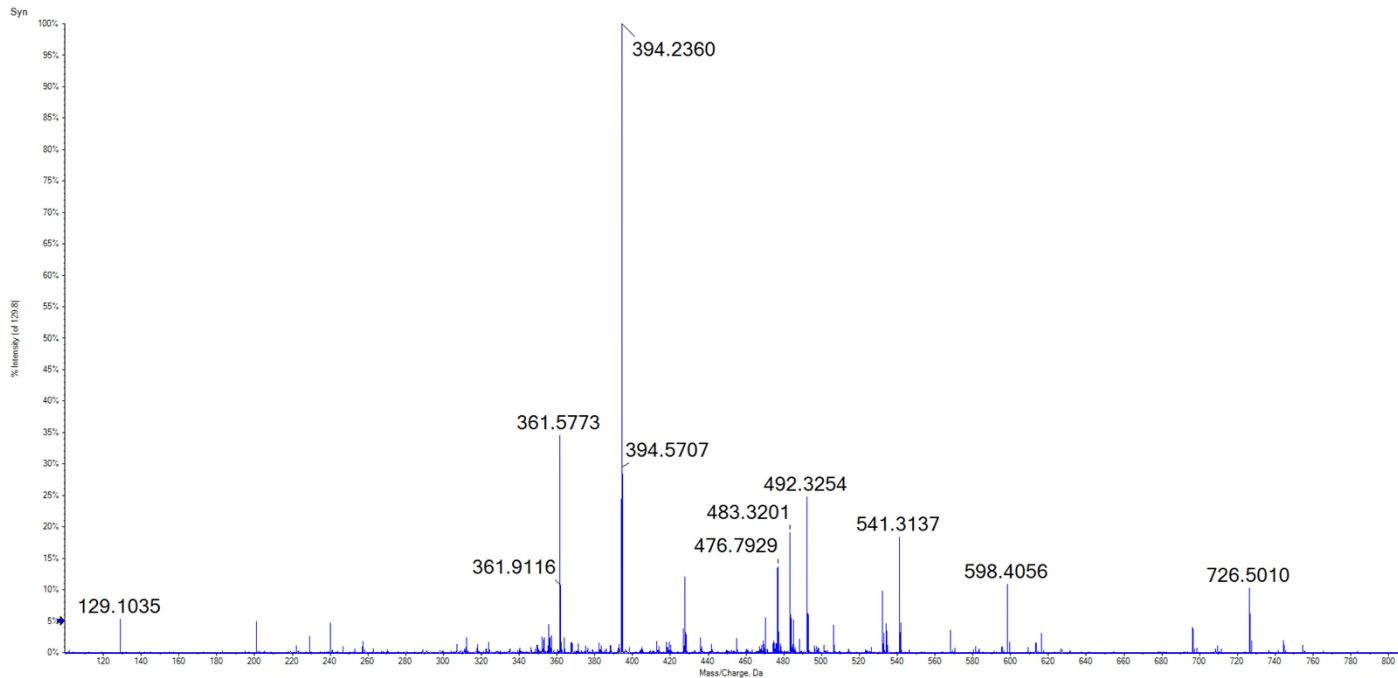
Candidate Spectrum



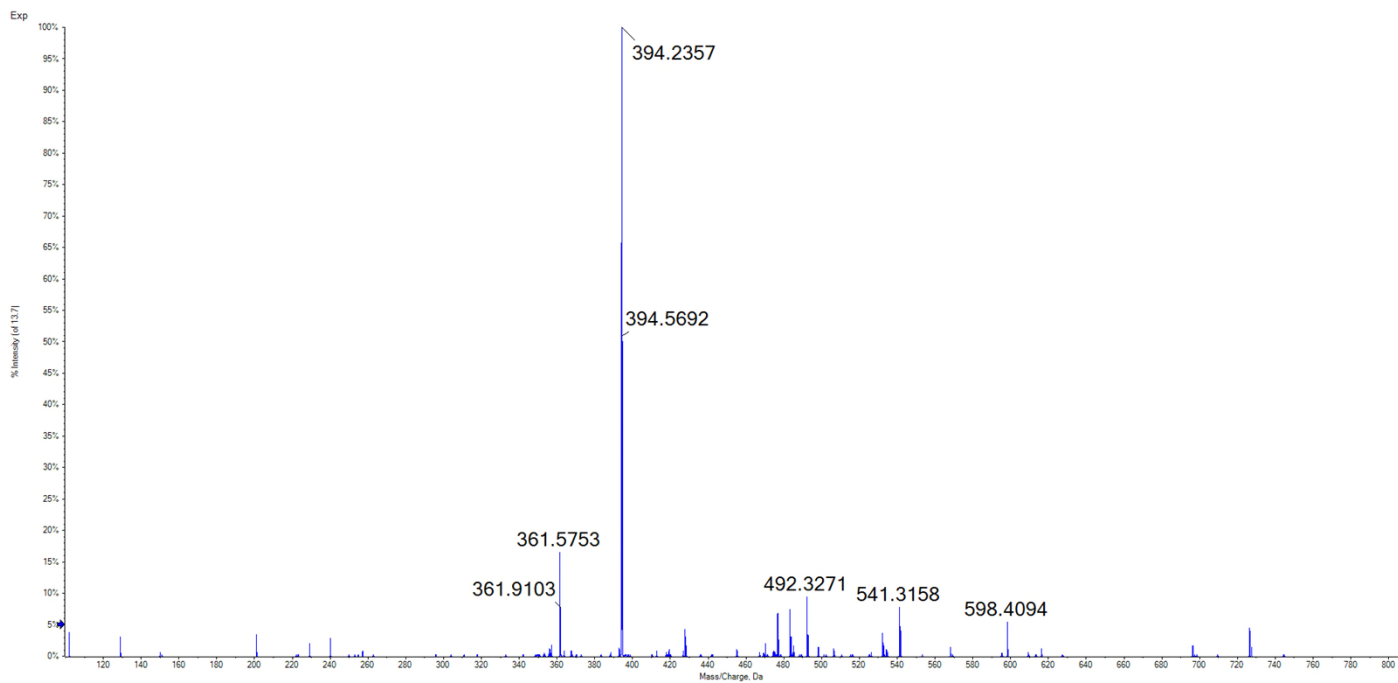
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VEKKKIR(pS)L

Synthetic
Peptide



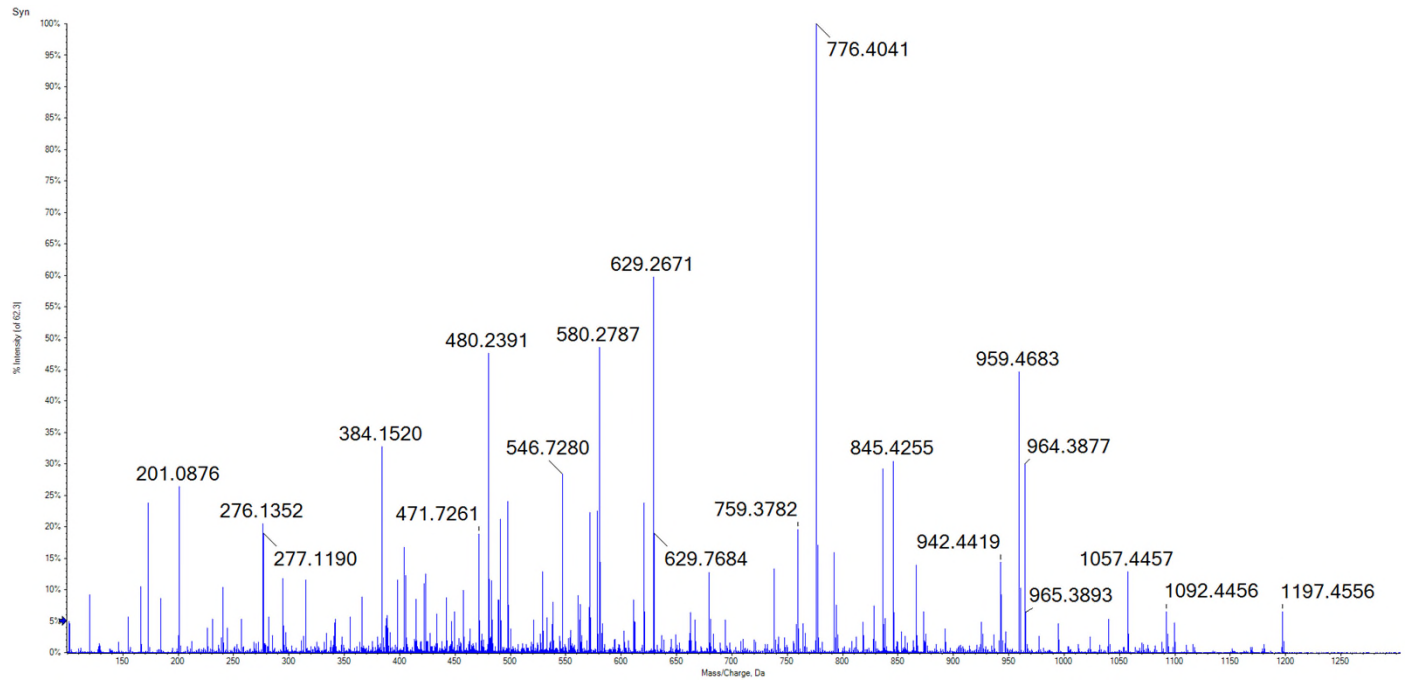
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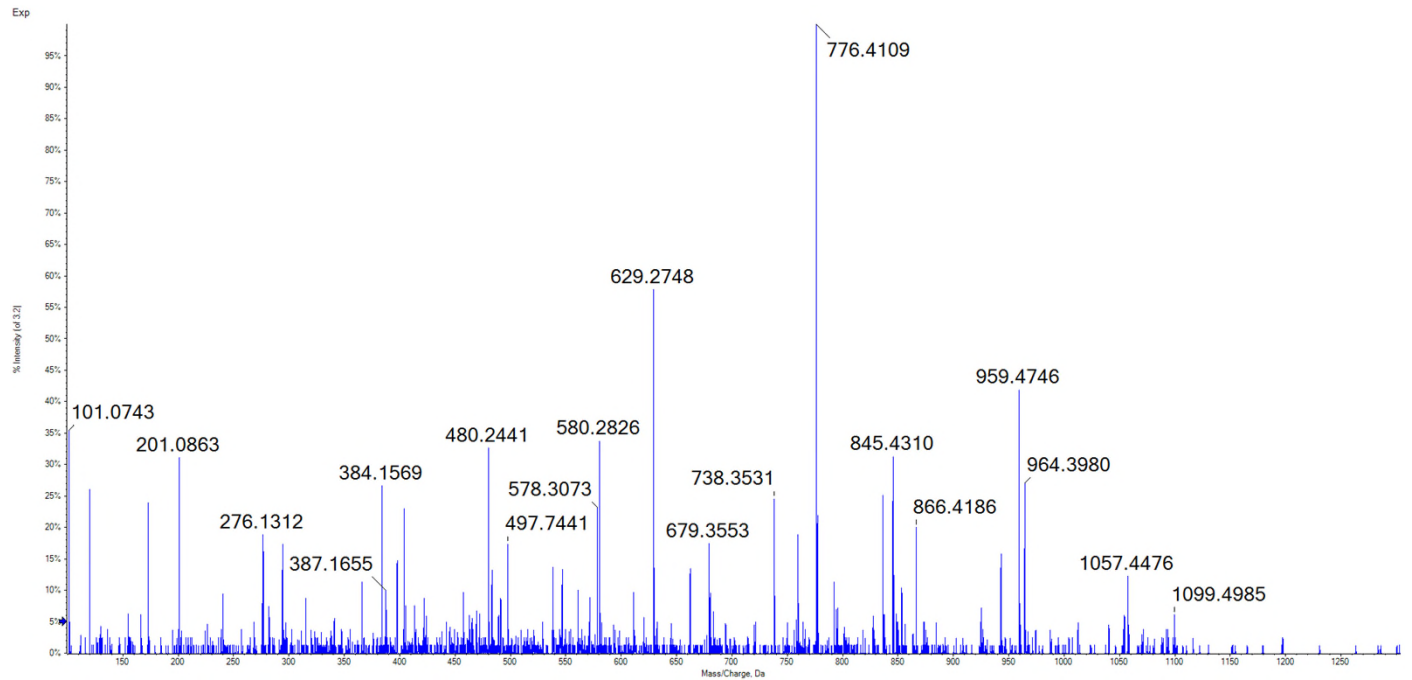
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AEN(pS)PTRQQF

Synthetic
Peptide



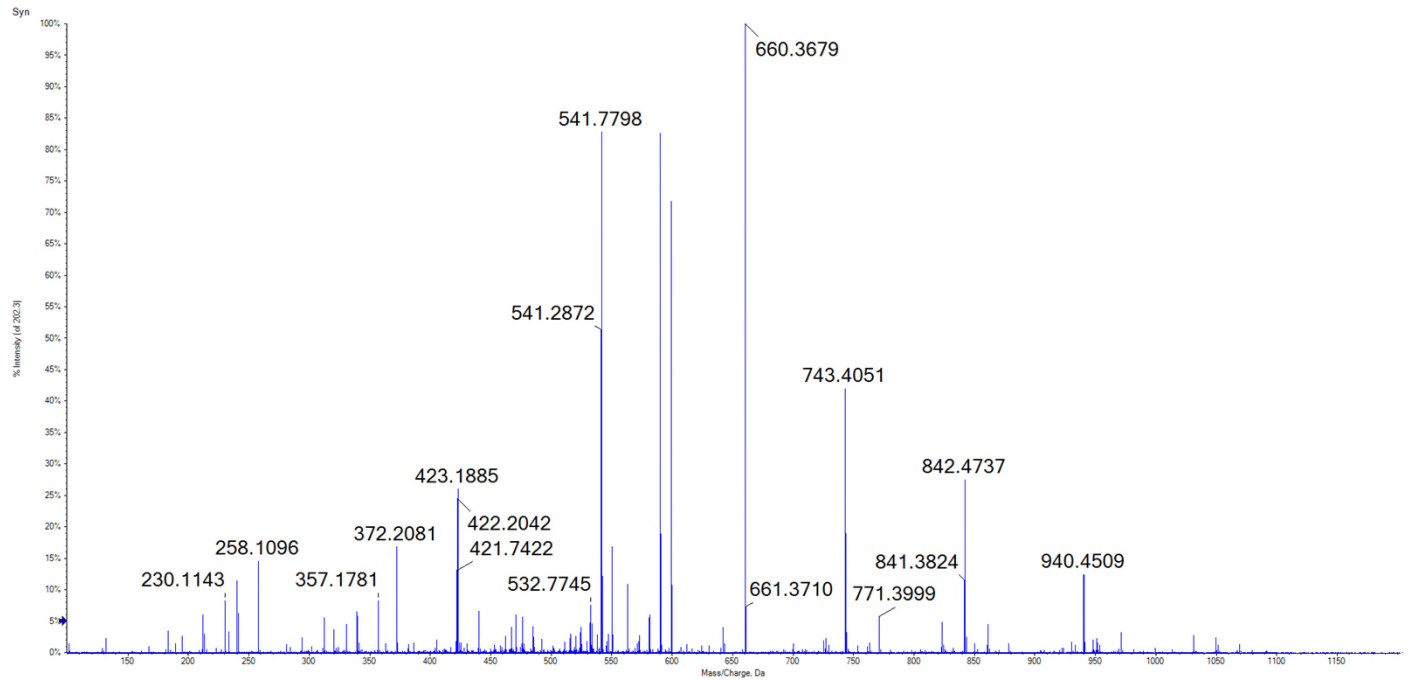
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Spectrum



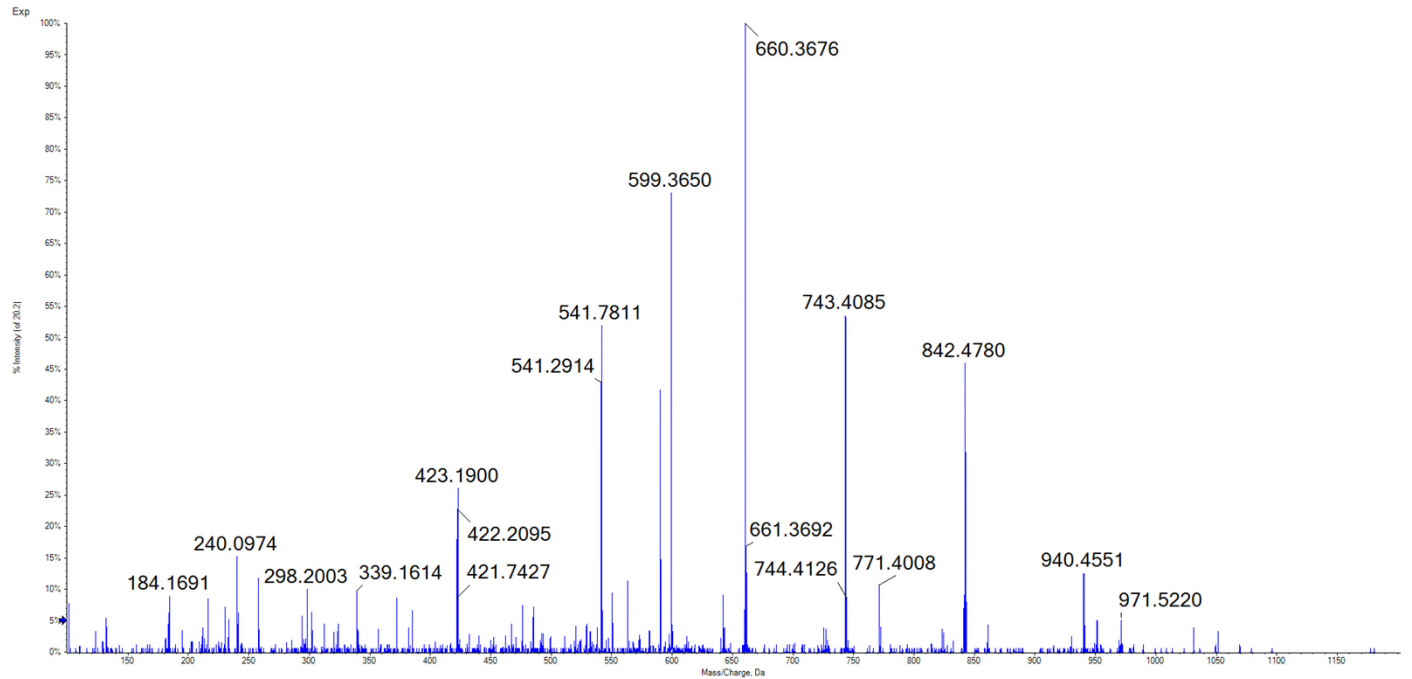
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QEV(pT)PSRSTL

Synthetic
Peptide



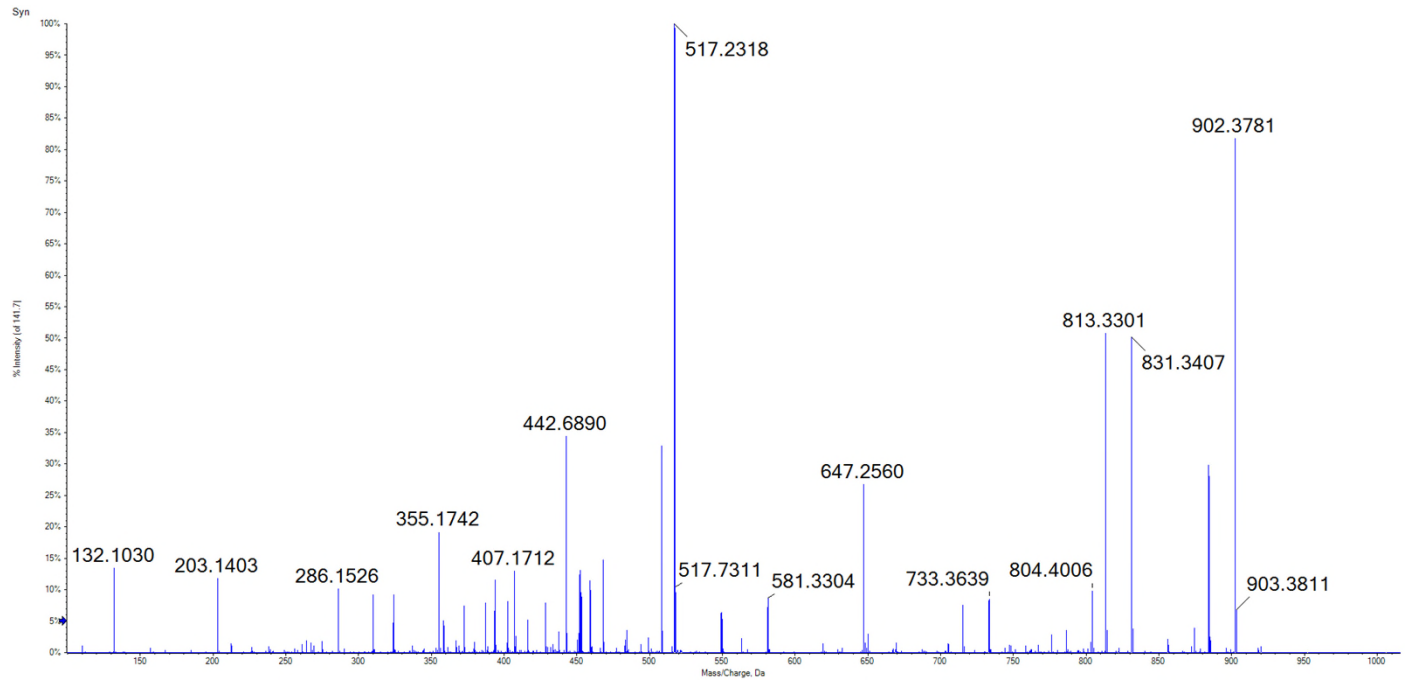
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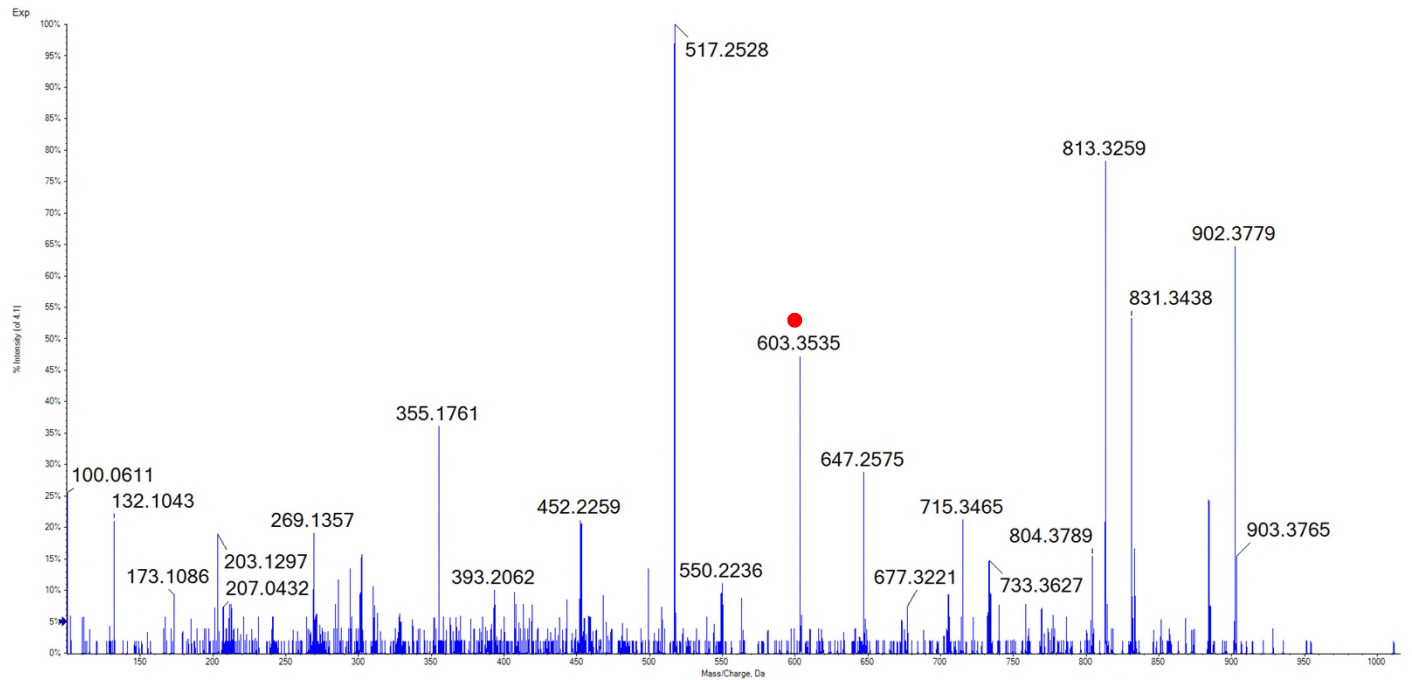
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RE(pS)PPPSAL

Synthetic
Peptide



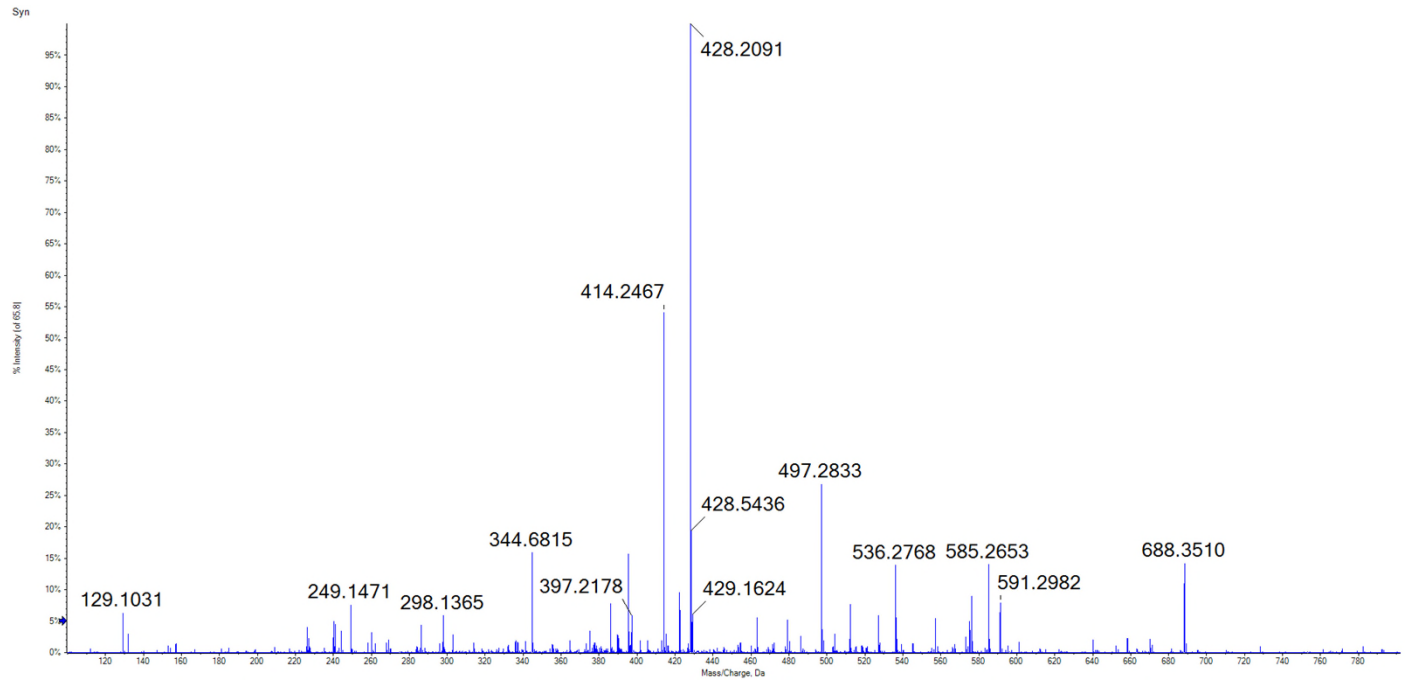
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Spectrum



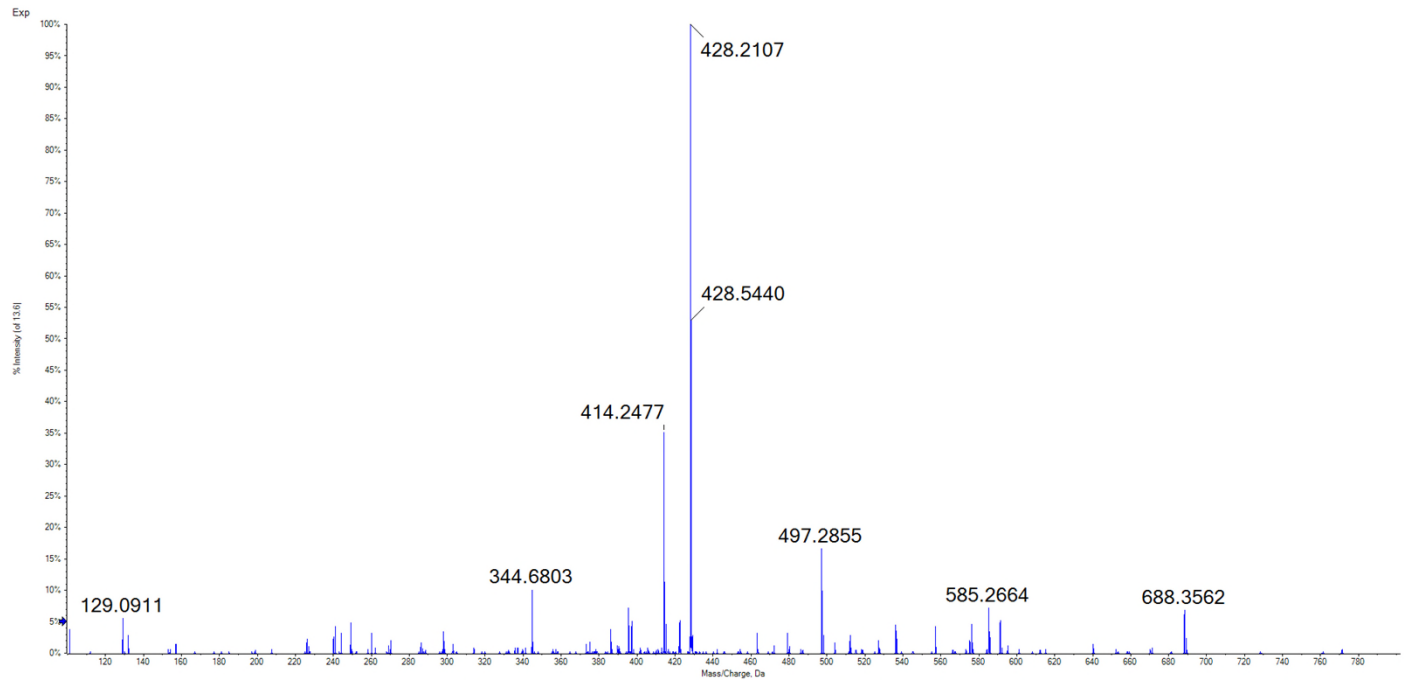
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REK(pT)PSEDKL

Synthetic
Peptide

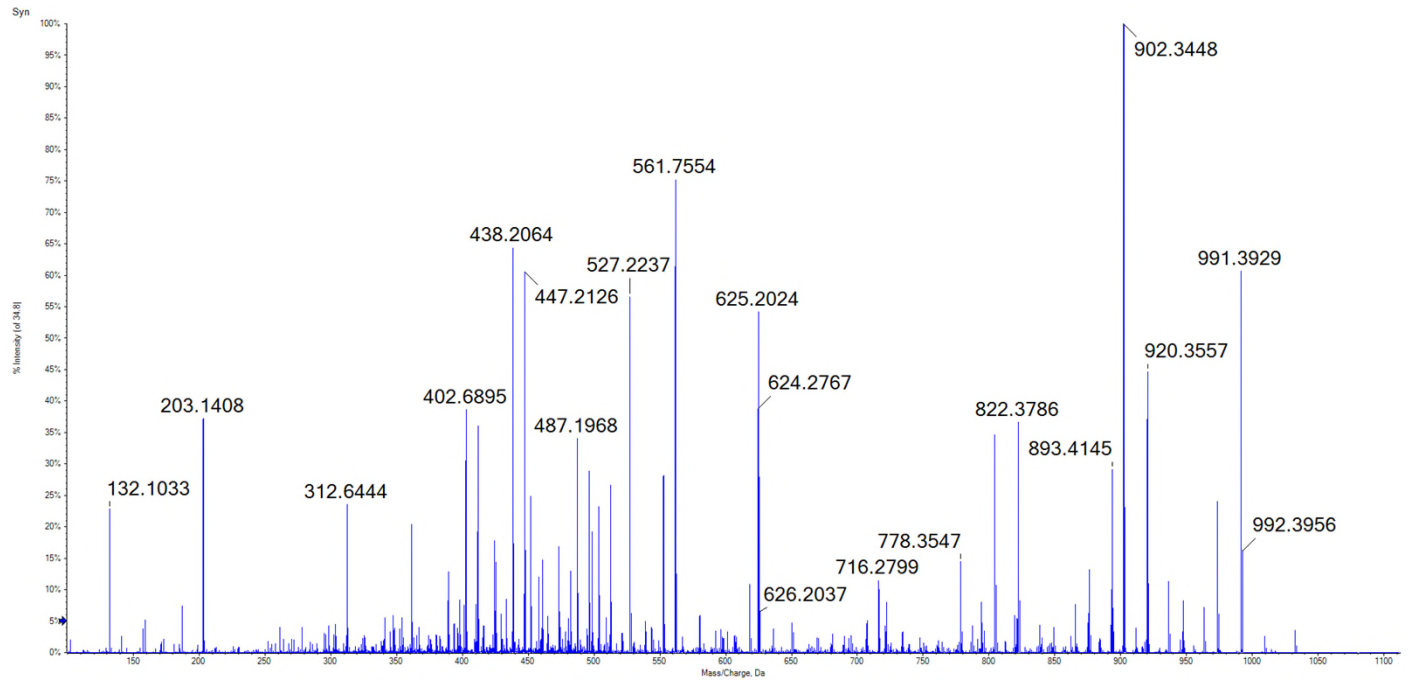


Candidate
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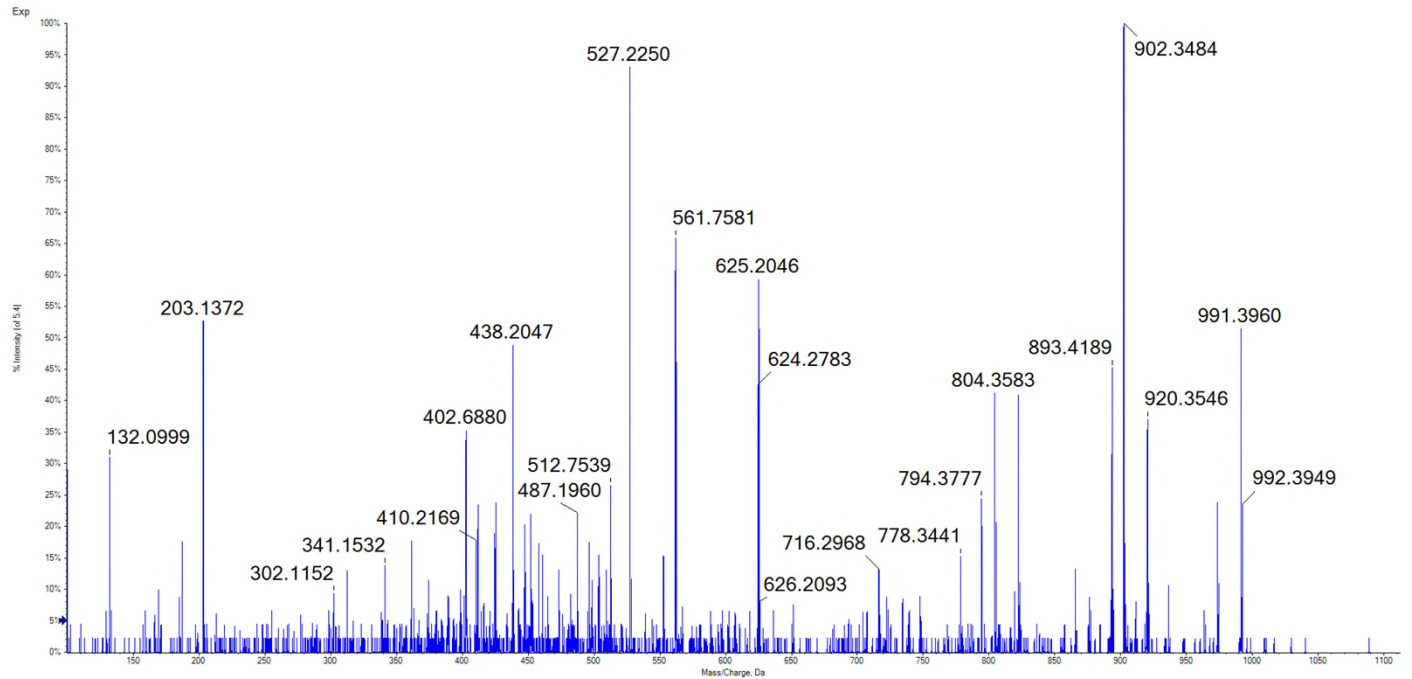


15 GEDR(pS)PPTAL

Synthetic
Peptide



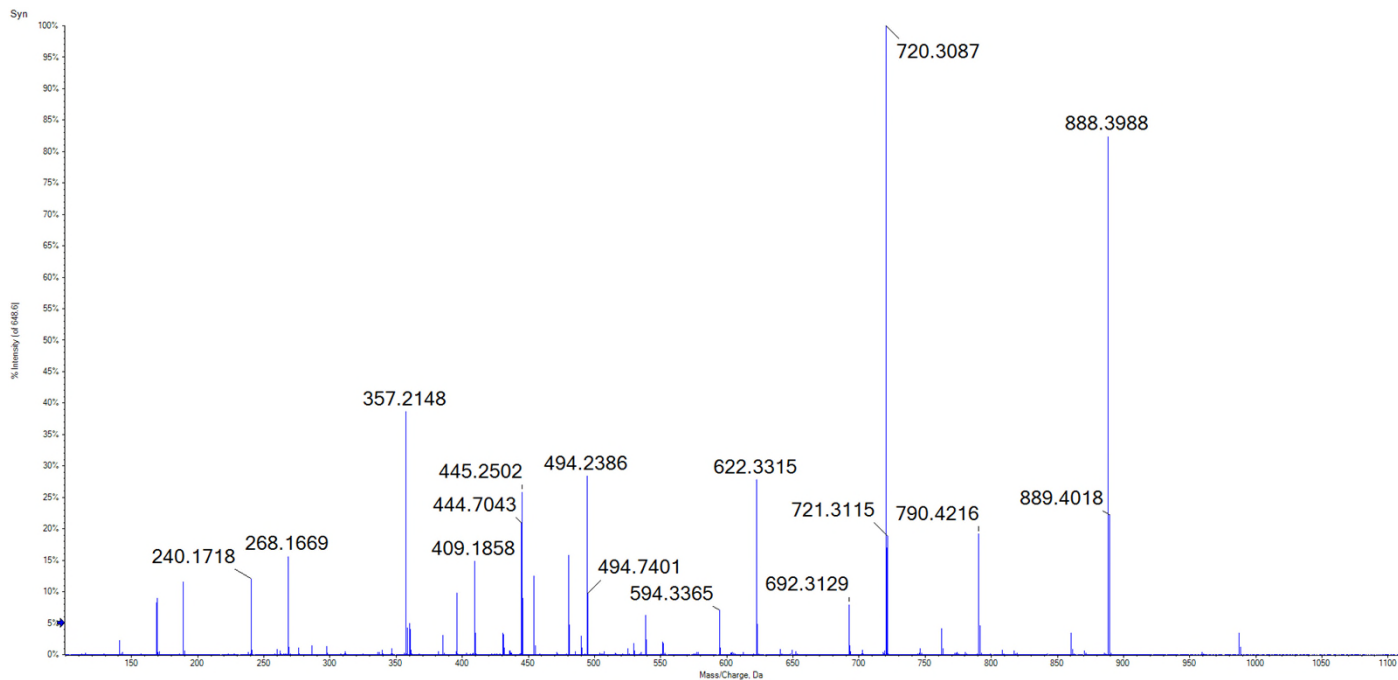
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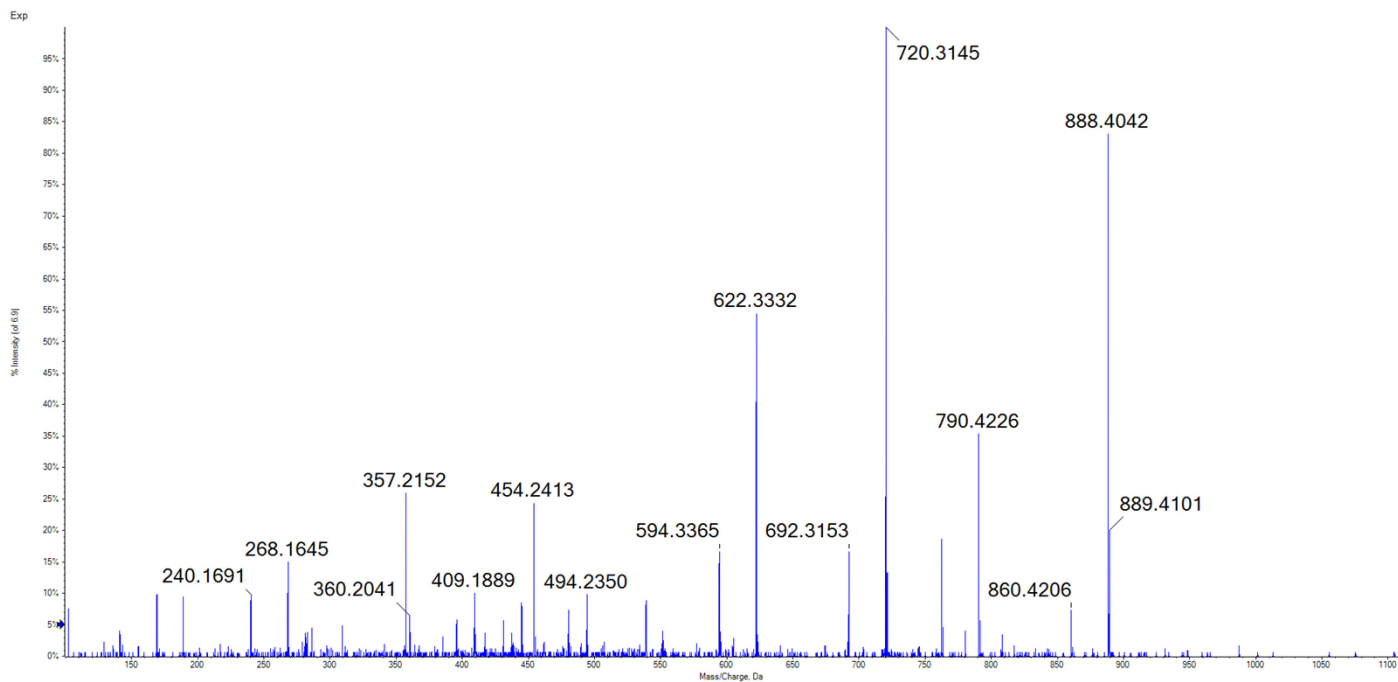
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REV(pS)PAPAVA

Synthetic
Peptide



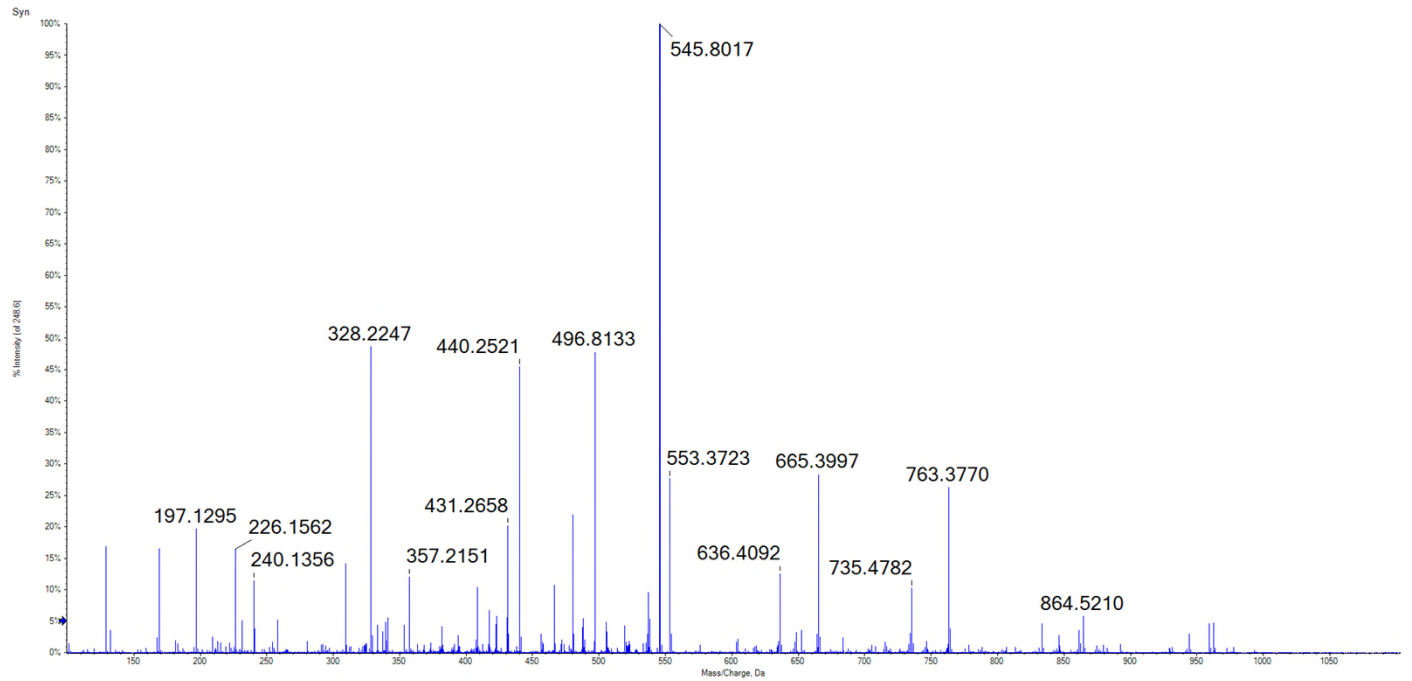
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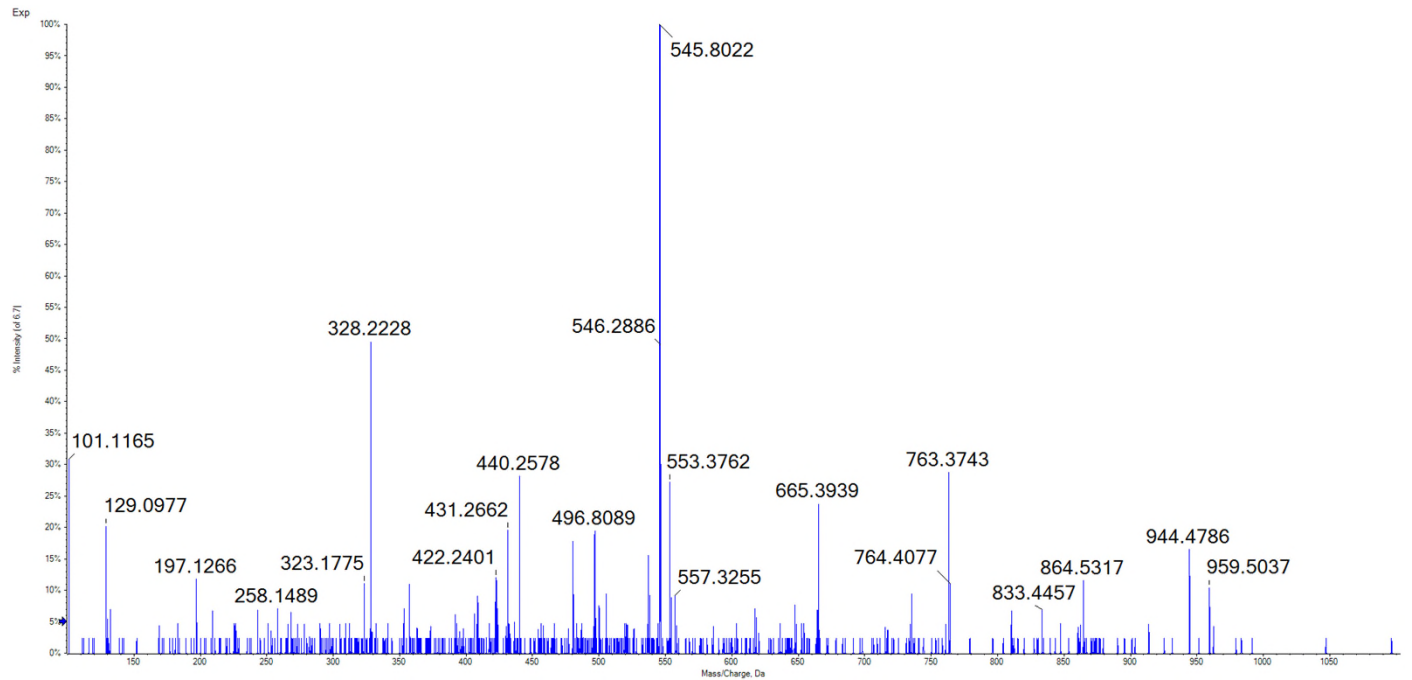
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KEV(pT)PKPVL

Synthetic
Peptide



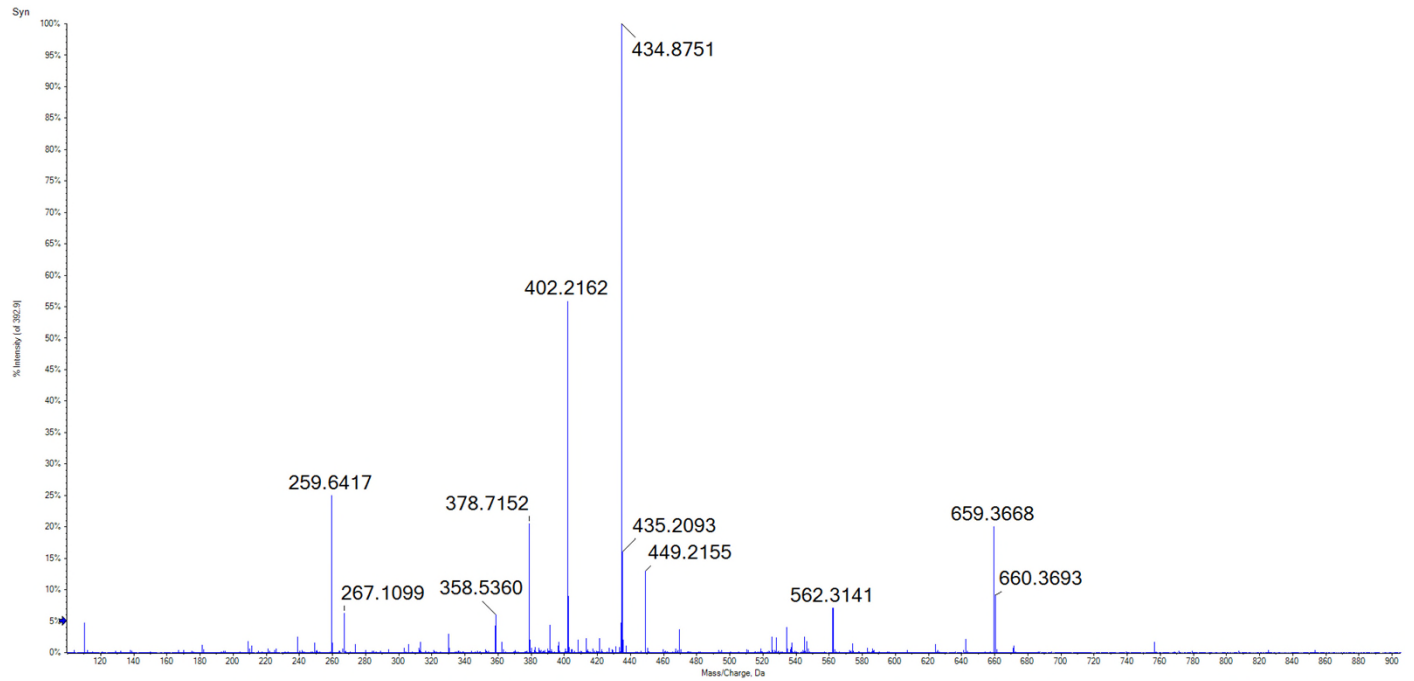
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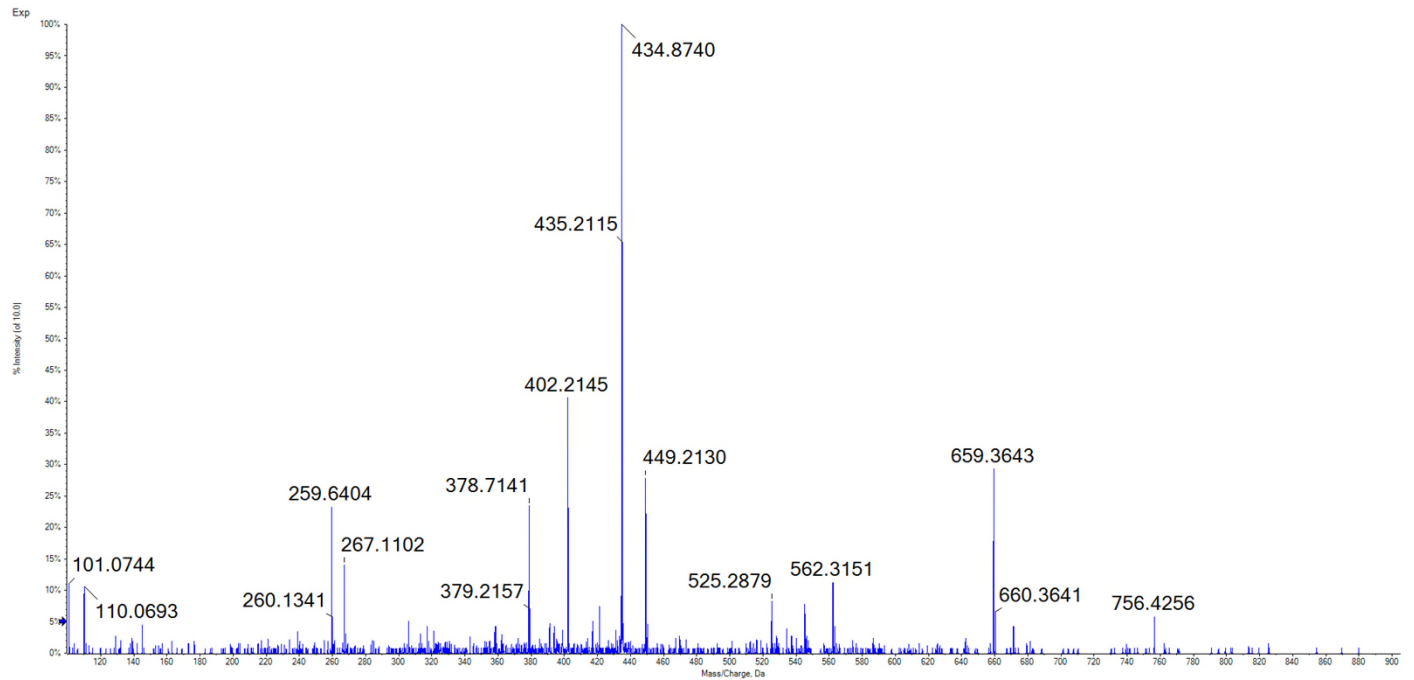
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HEL(pS)PPQKRM

Synthetic
Peptide



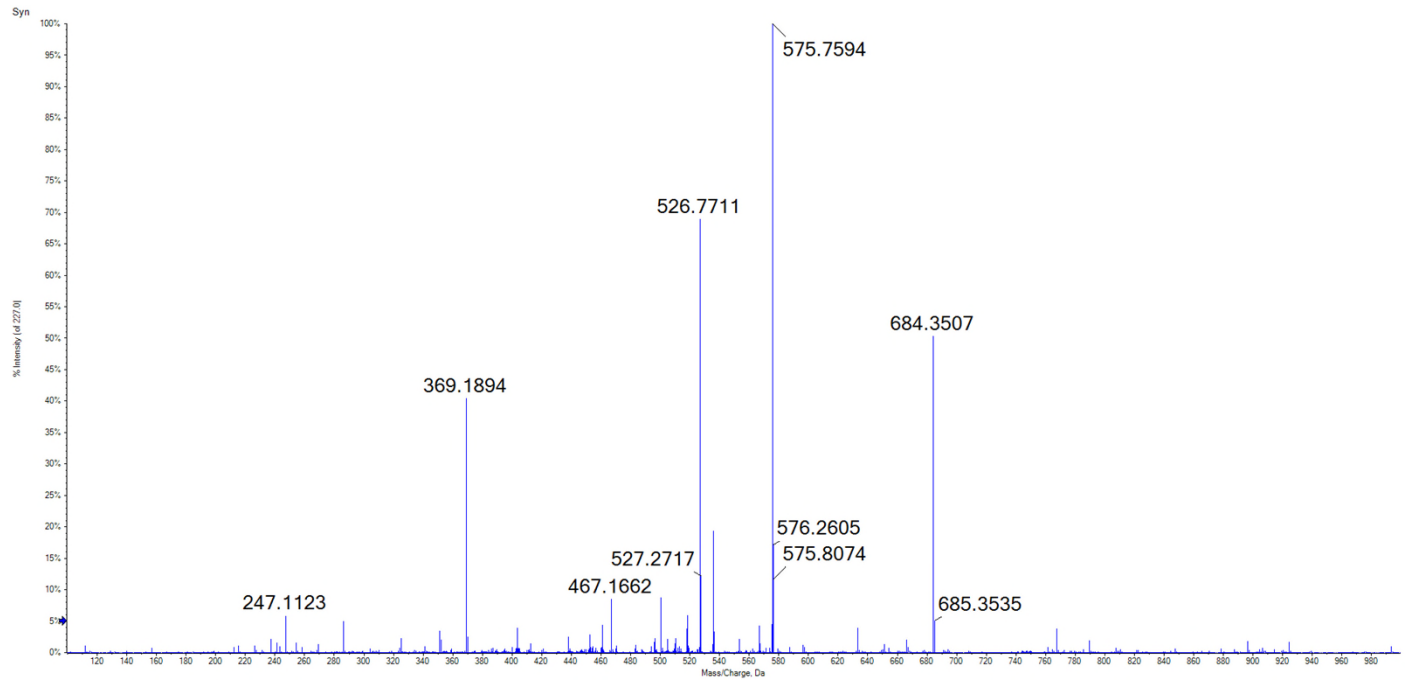
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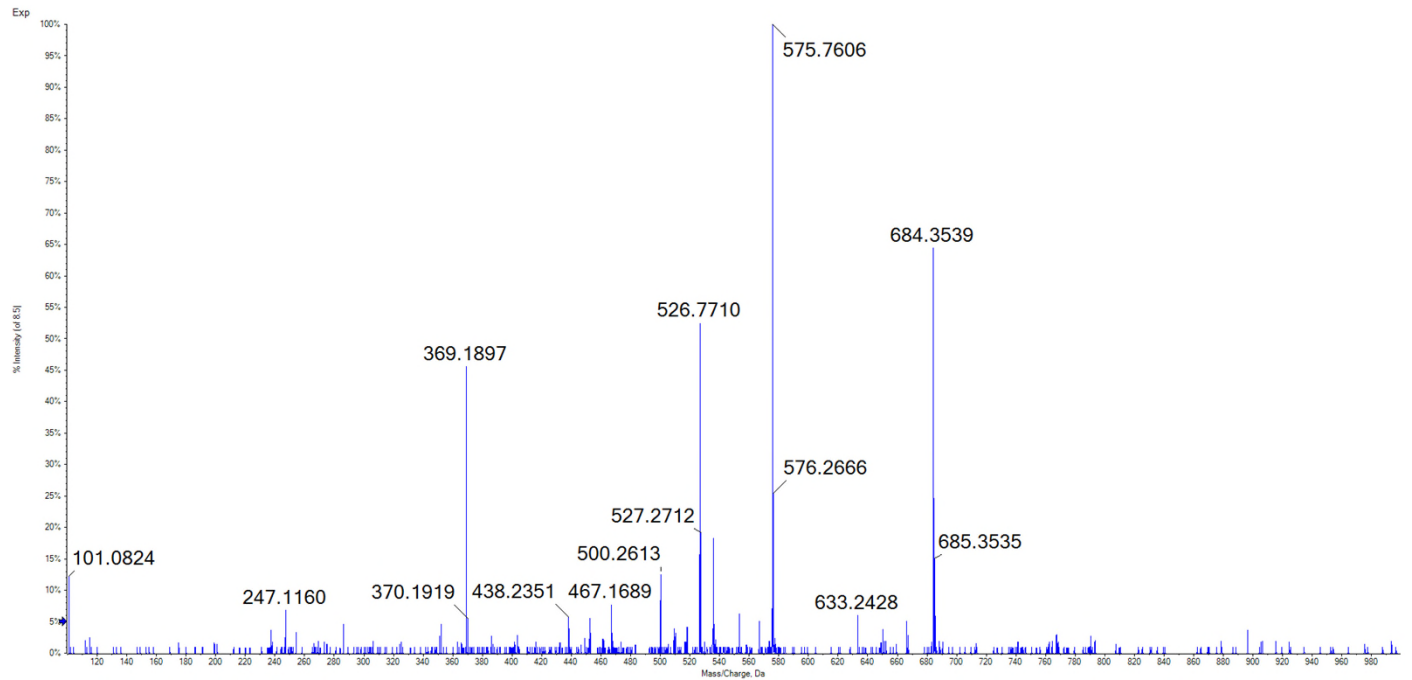
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RE(pT)PSPRPM

Synthetic
Peptide

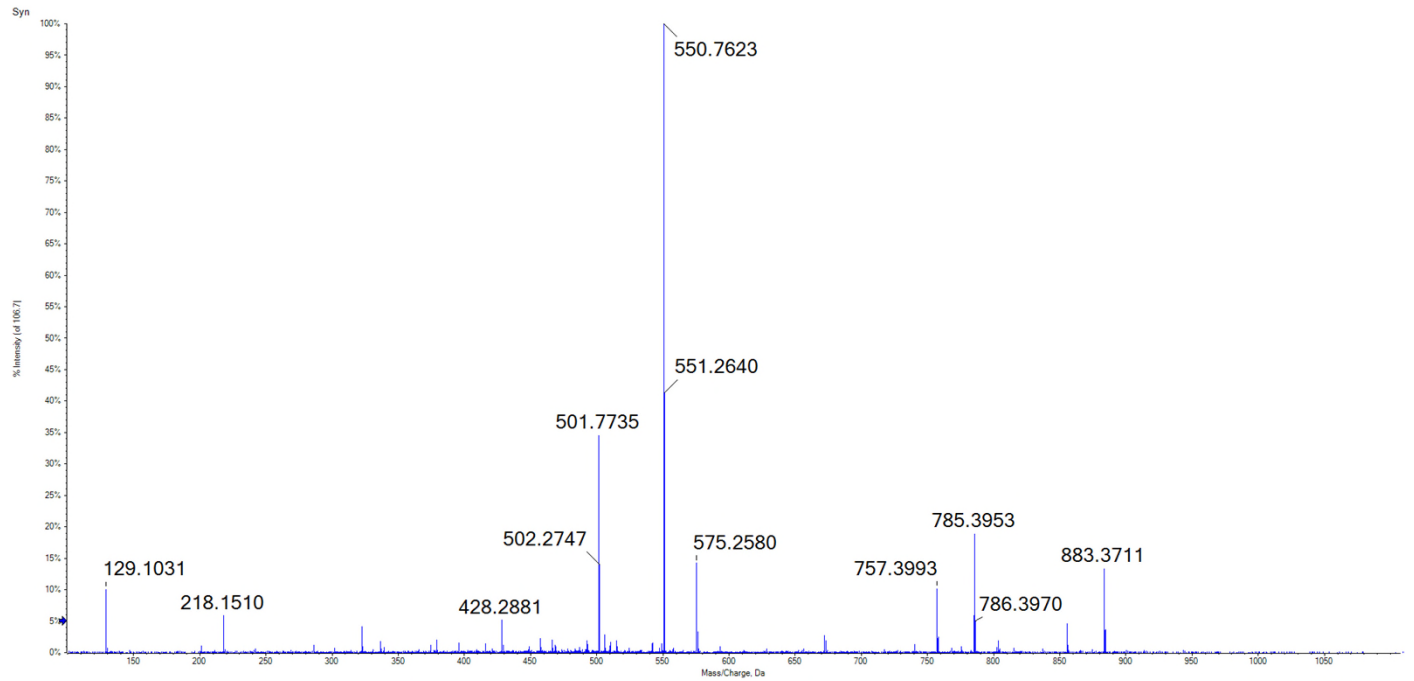


Candidate
Spectrum

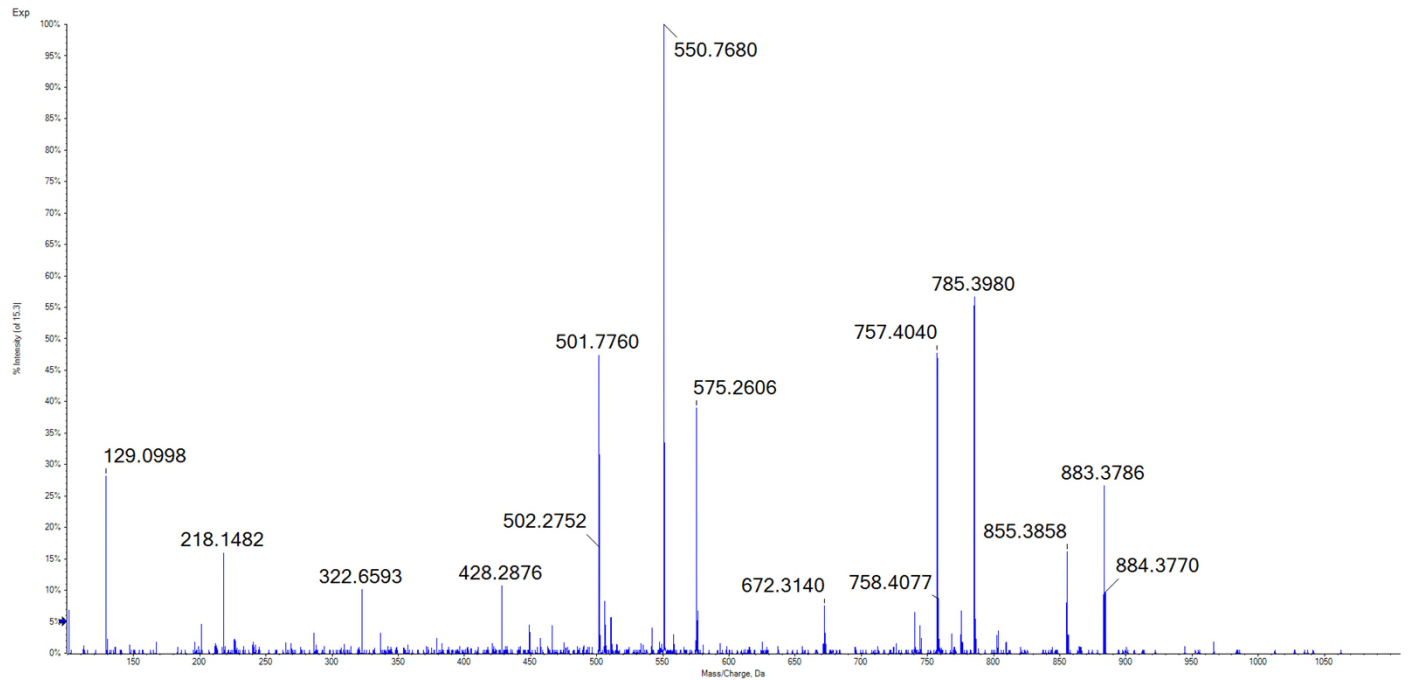


20 REYG(pS)PLKA

Synthetic
Peptide



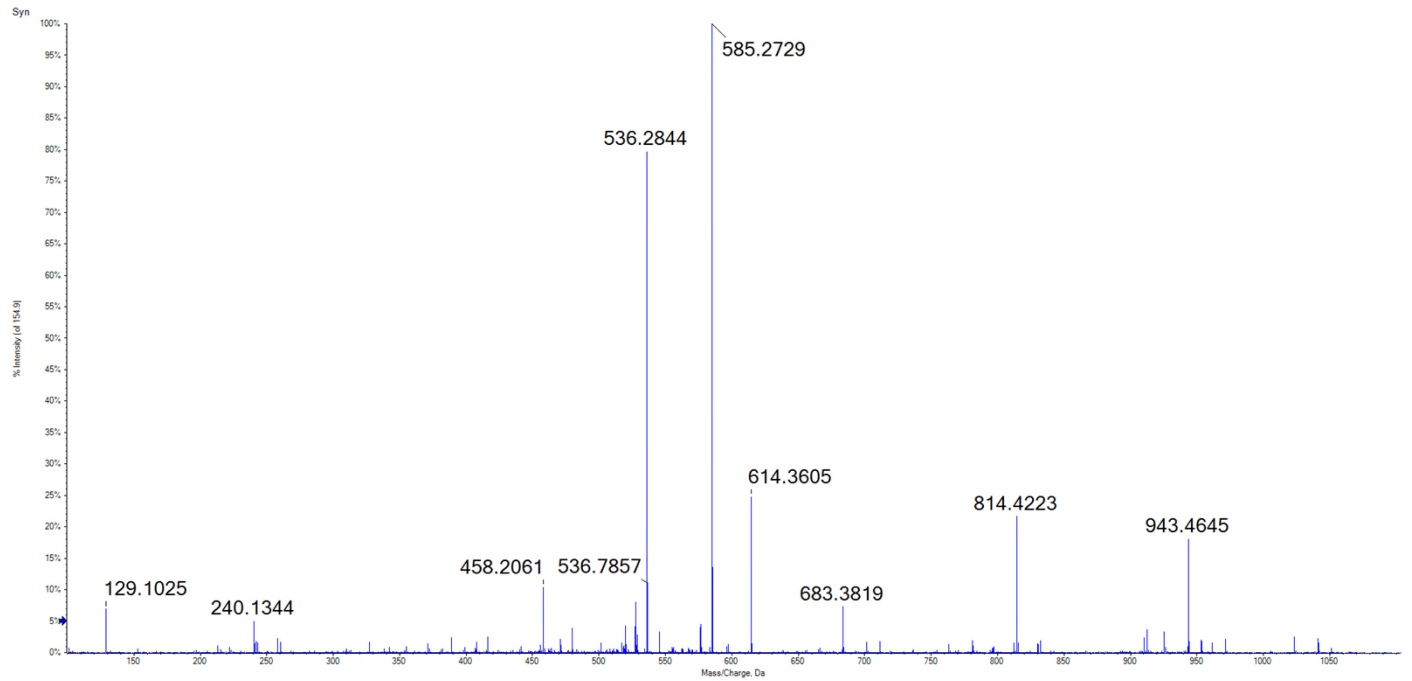
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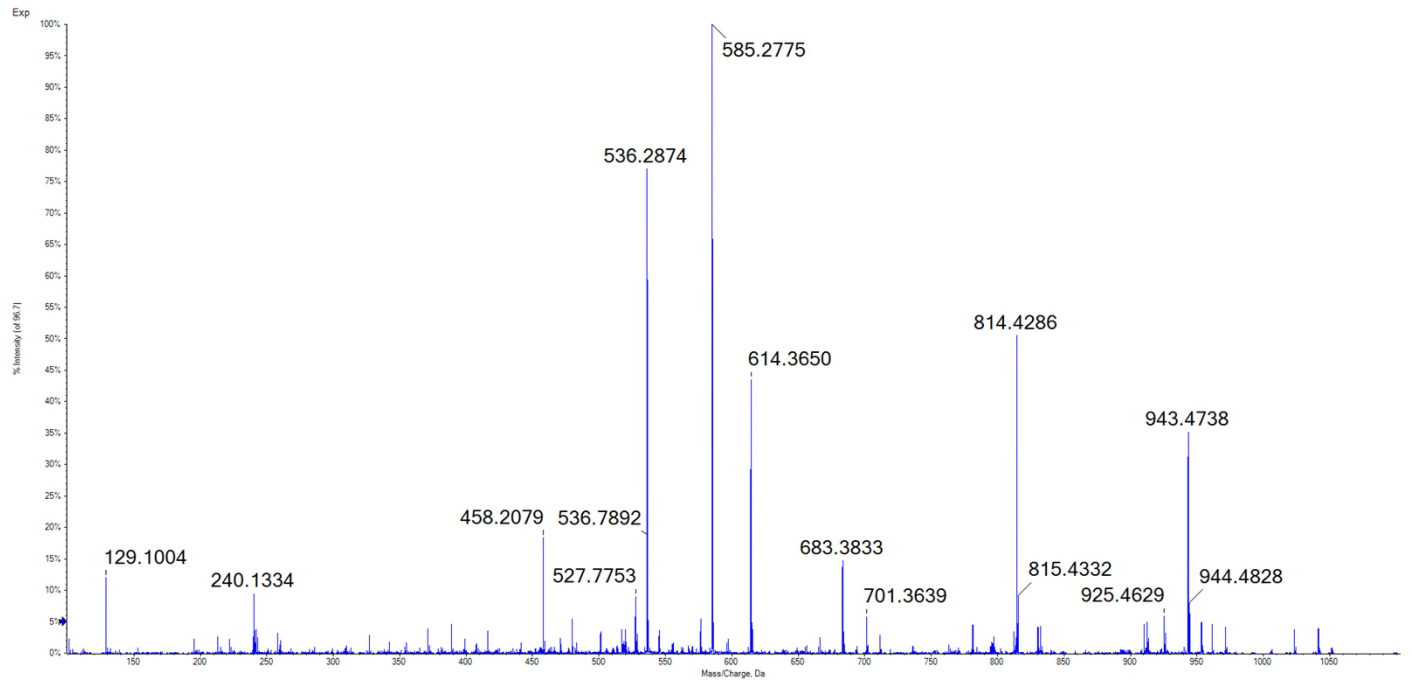
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KEM(pS)PTRQL

Synthetic
Peptide



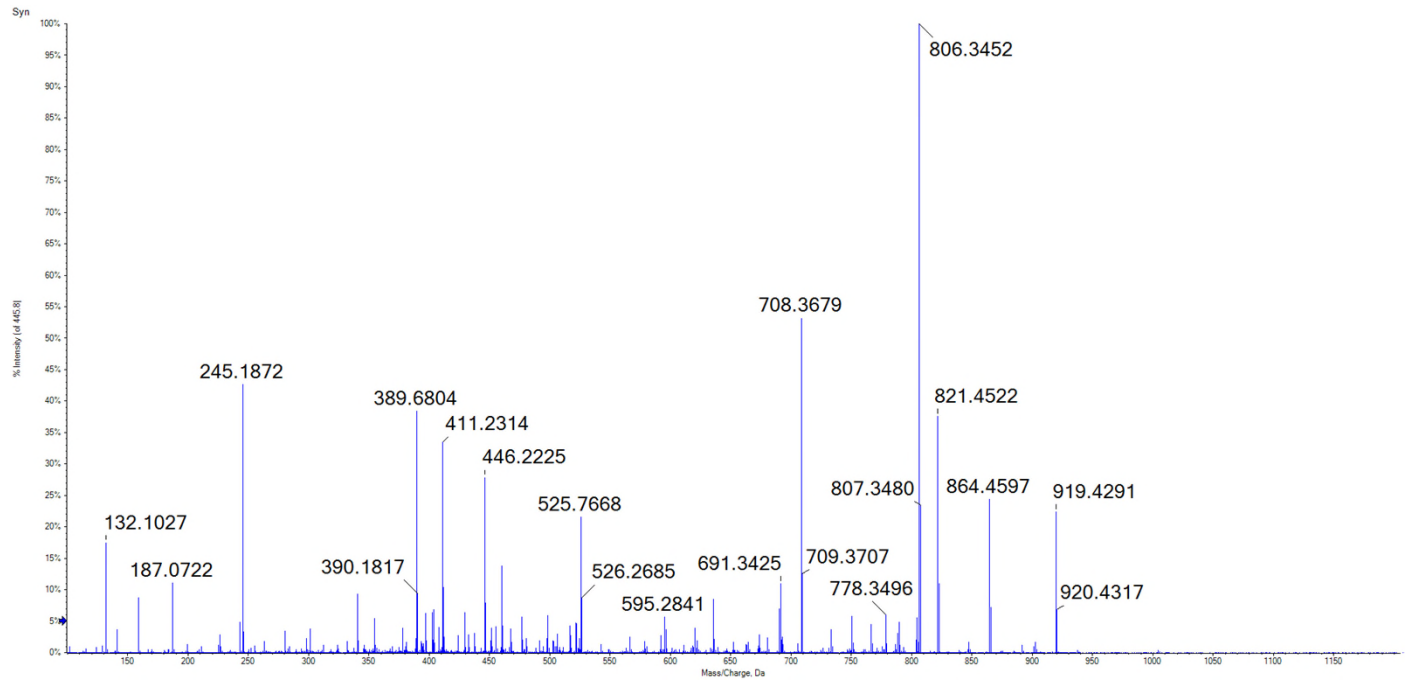
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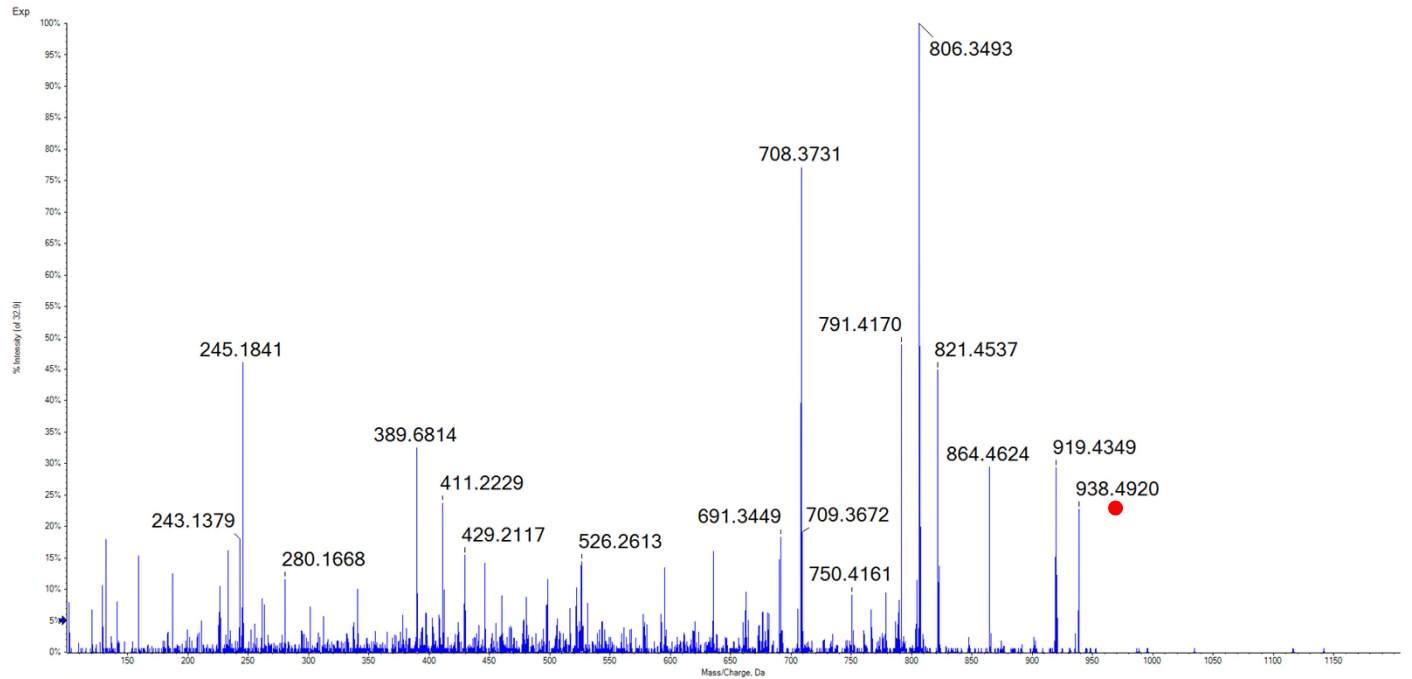
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GENK(pS)PLLL

Synthetic
Peptide



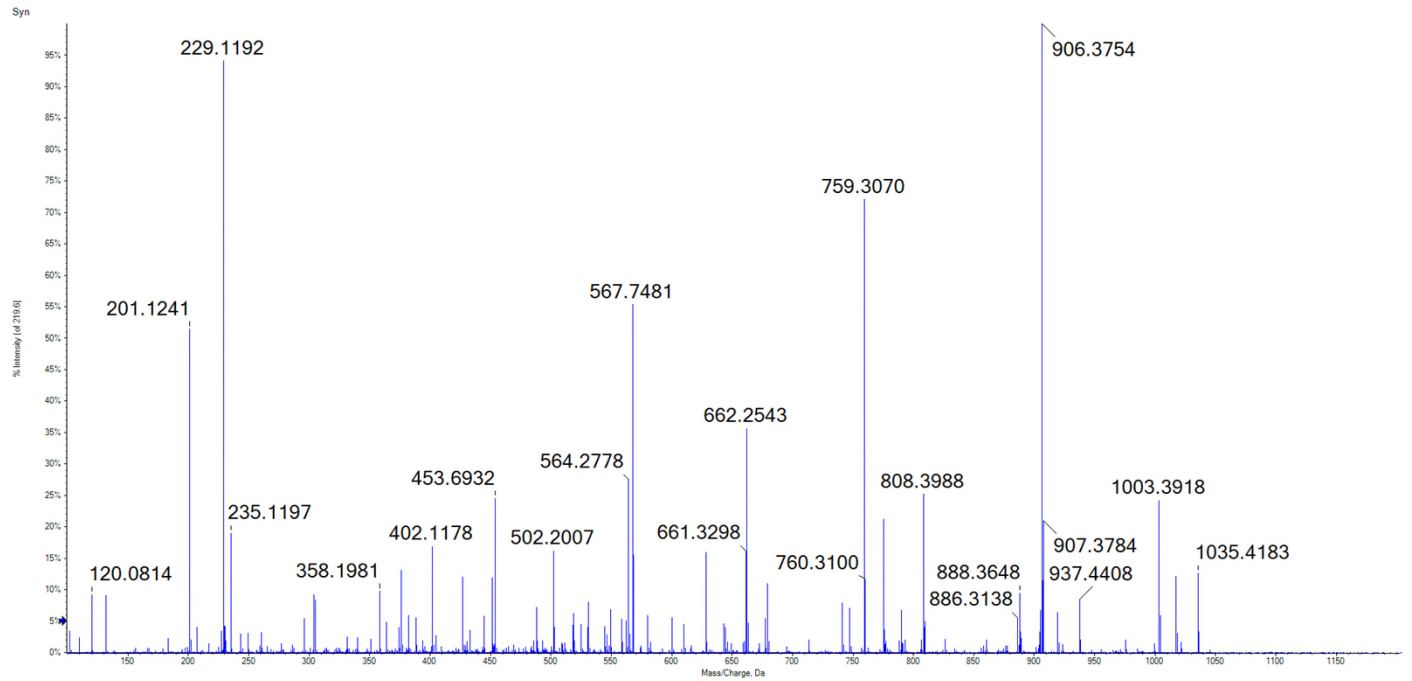
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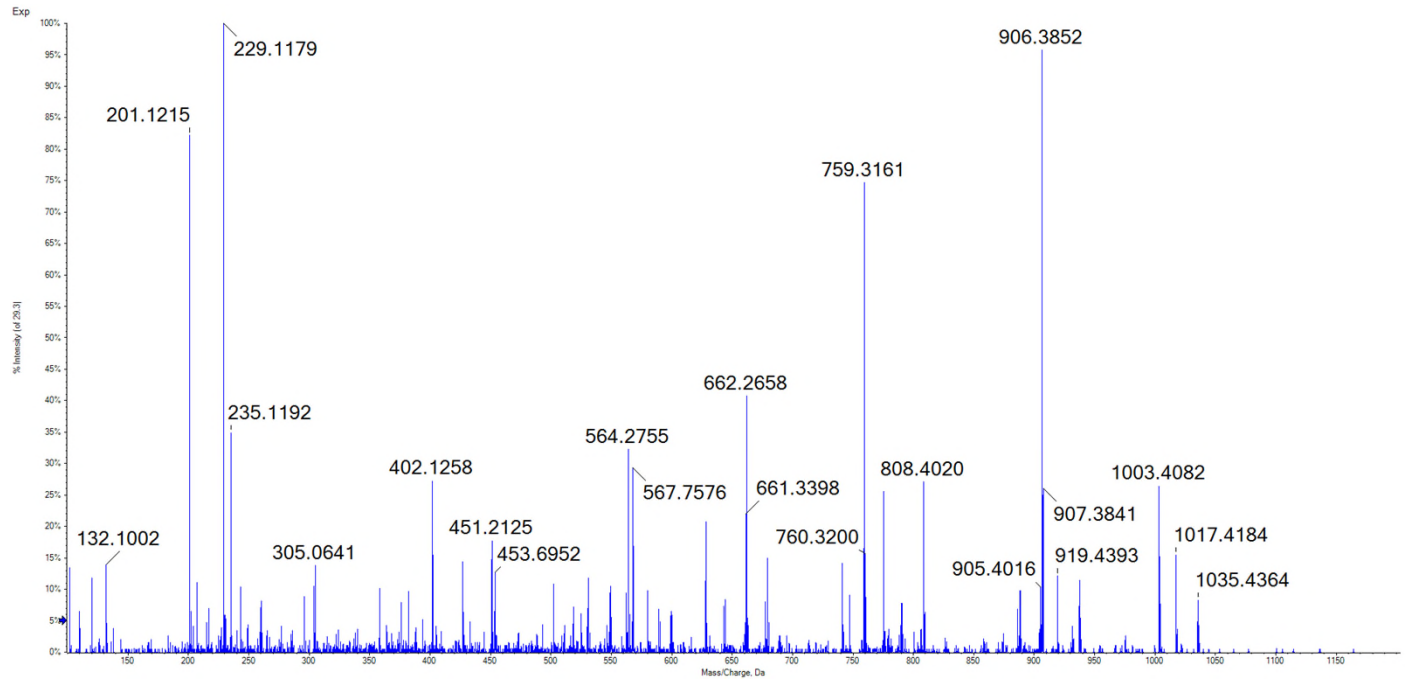
23

VEFPH(pS)PEI

Synthetic Peptide



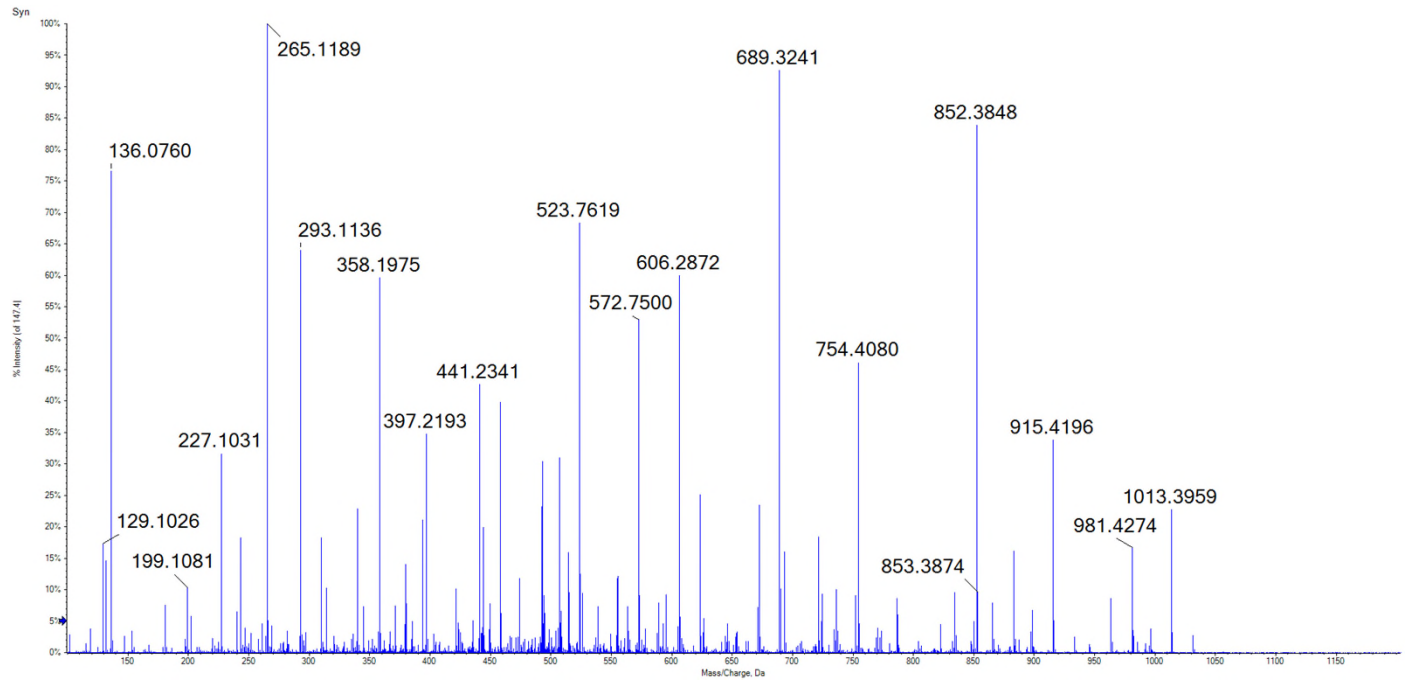
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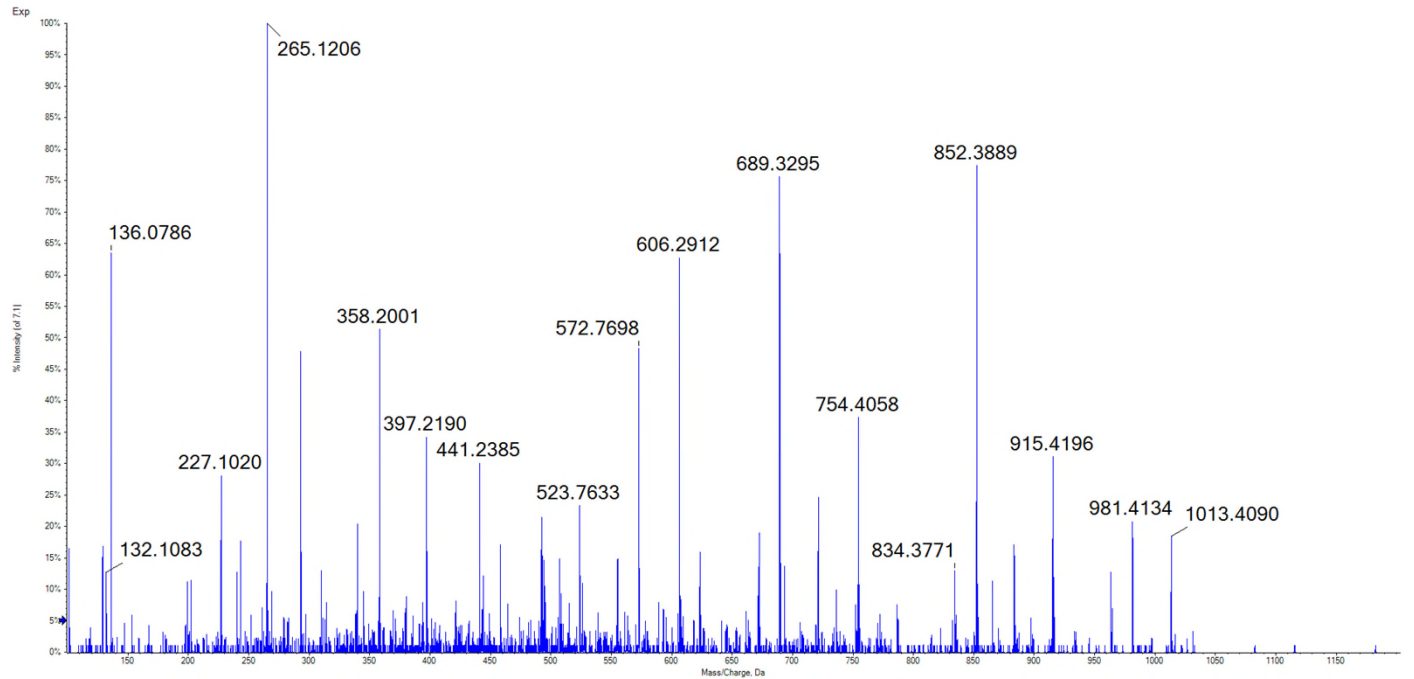
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YEKAN(pT)PEL

Synthetic
Peptide

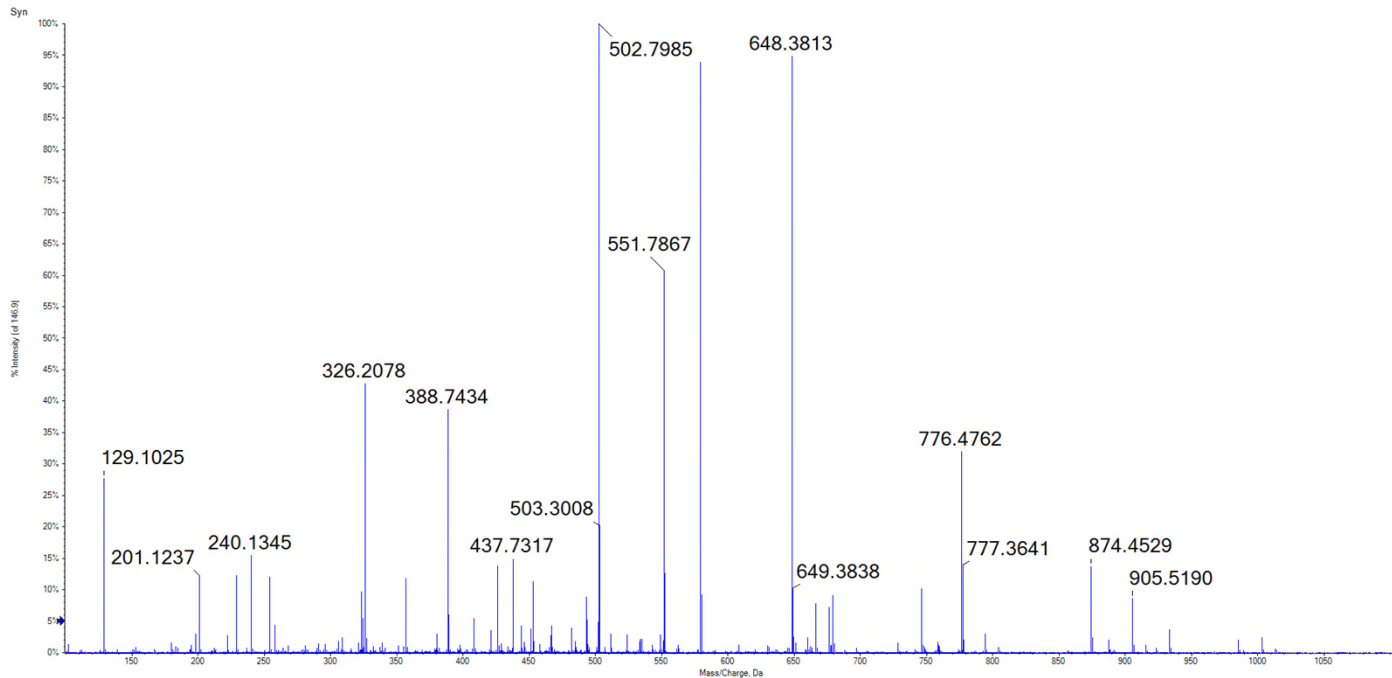


Candidate
Spectrum

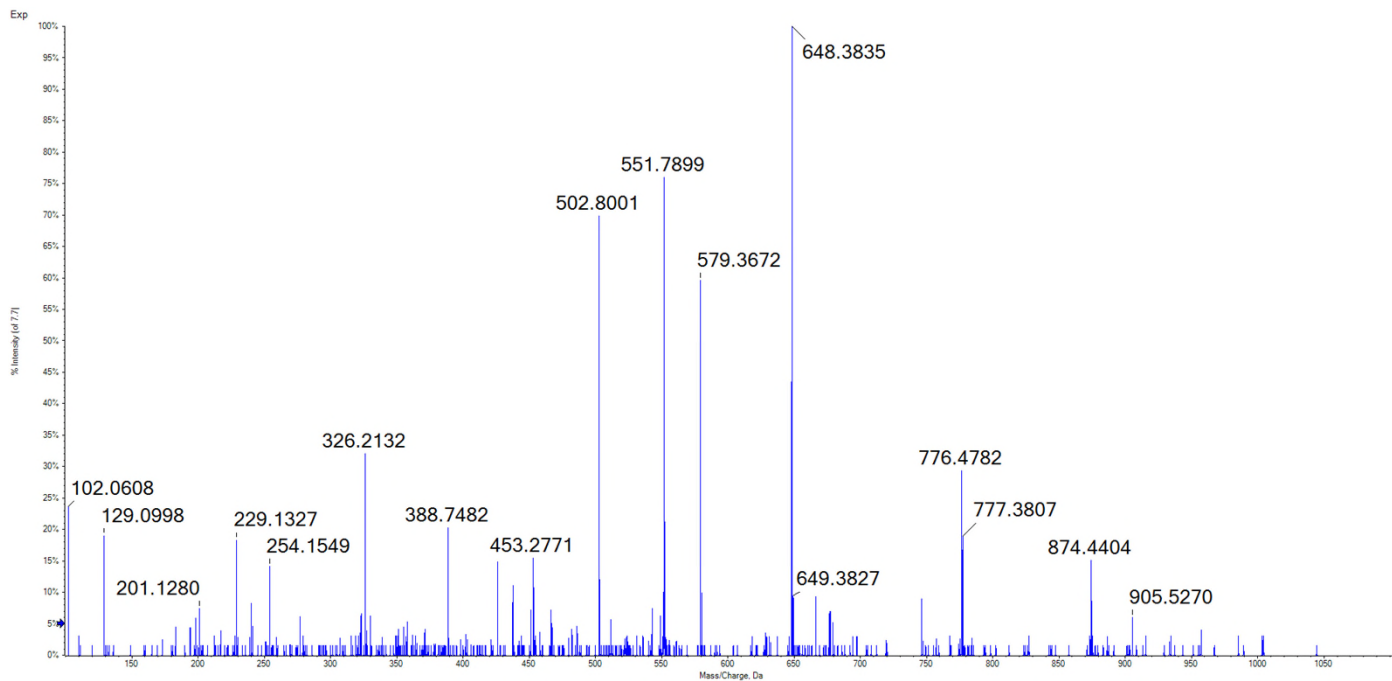


25 VEK(pS)PRPPL

Synthetic
Peptide



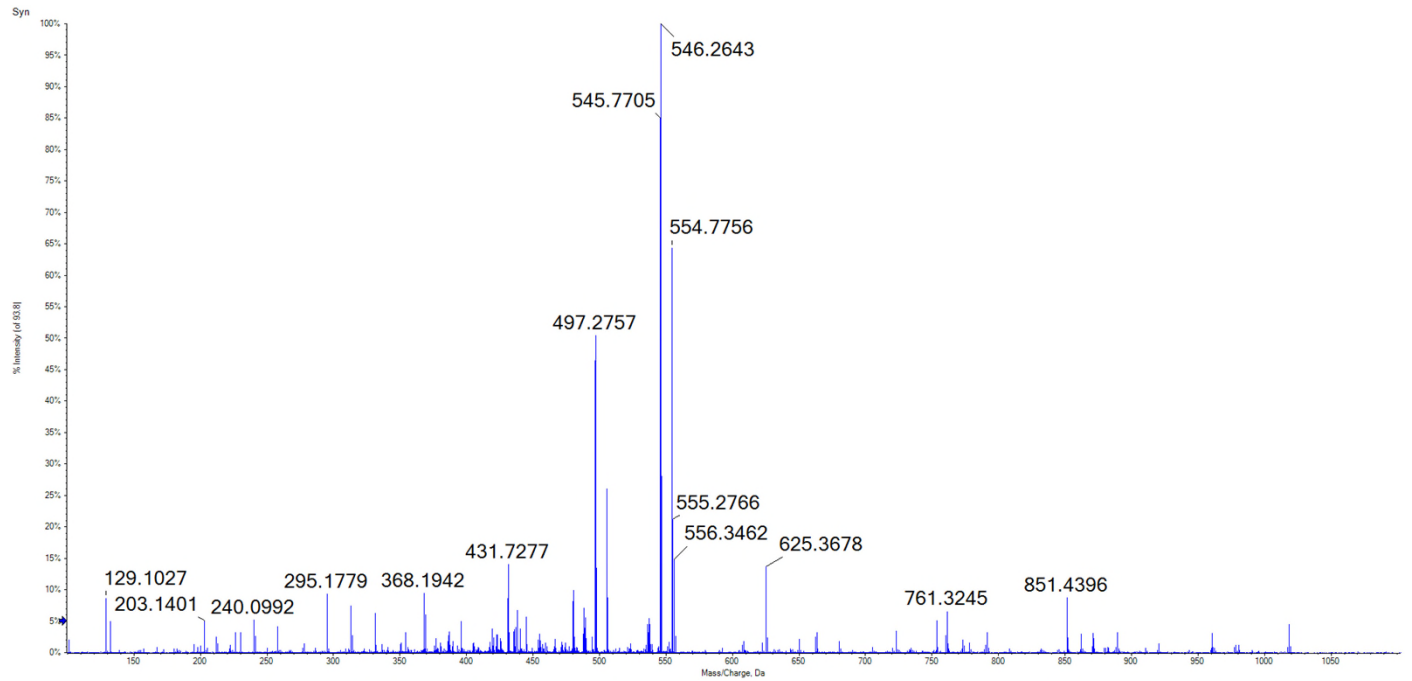
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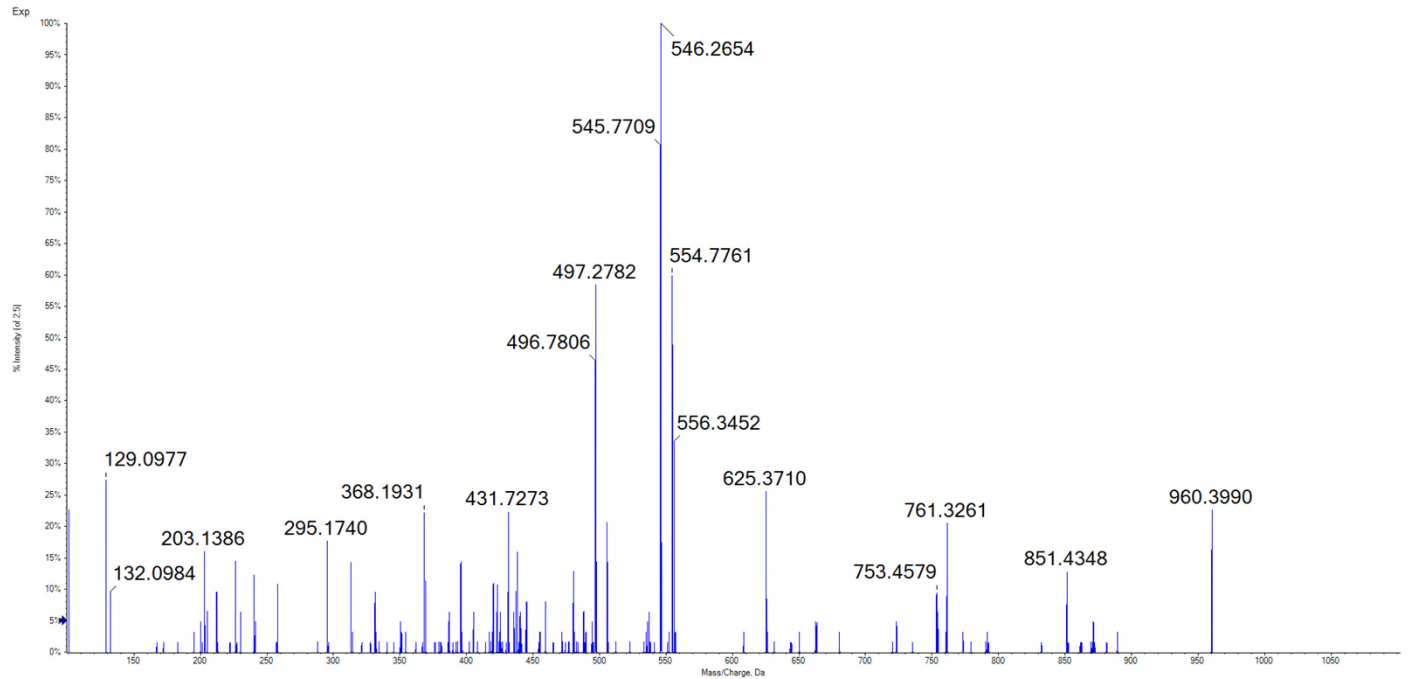
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QEK(pS)PKQAL

Synthetic
Peptide



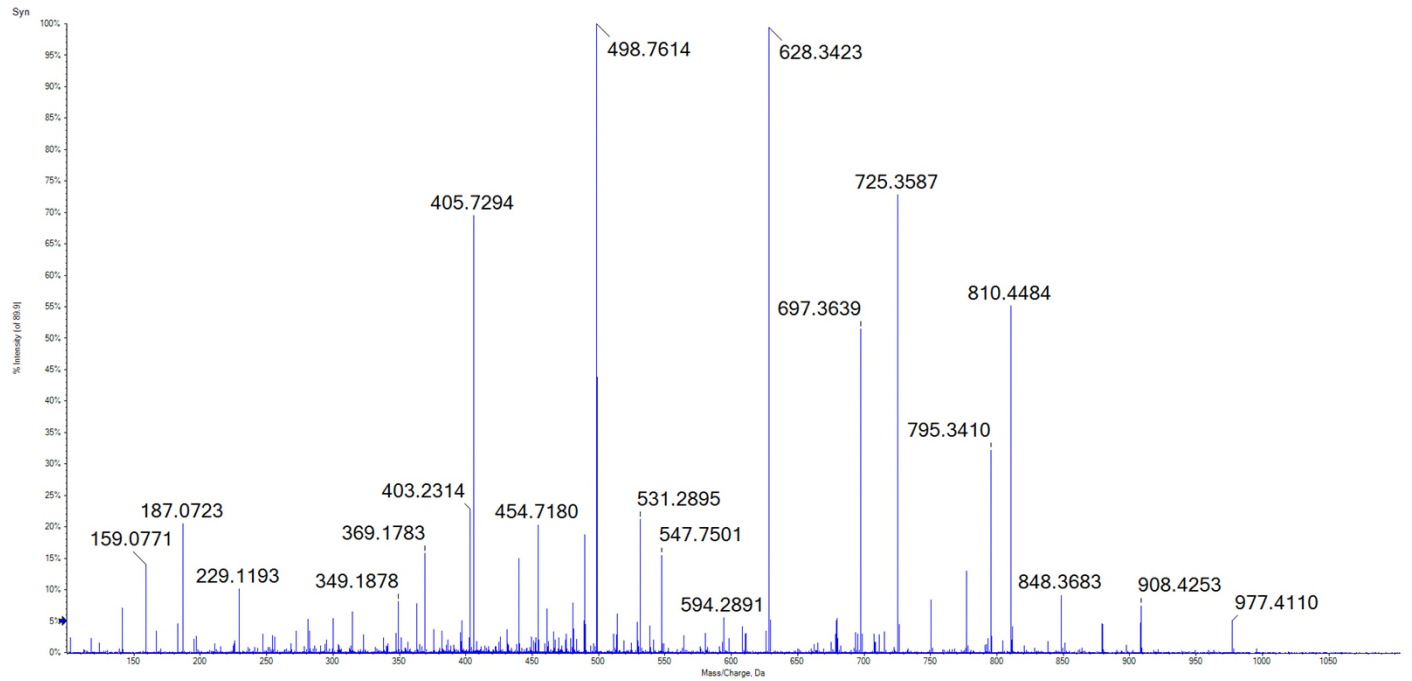
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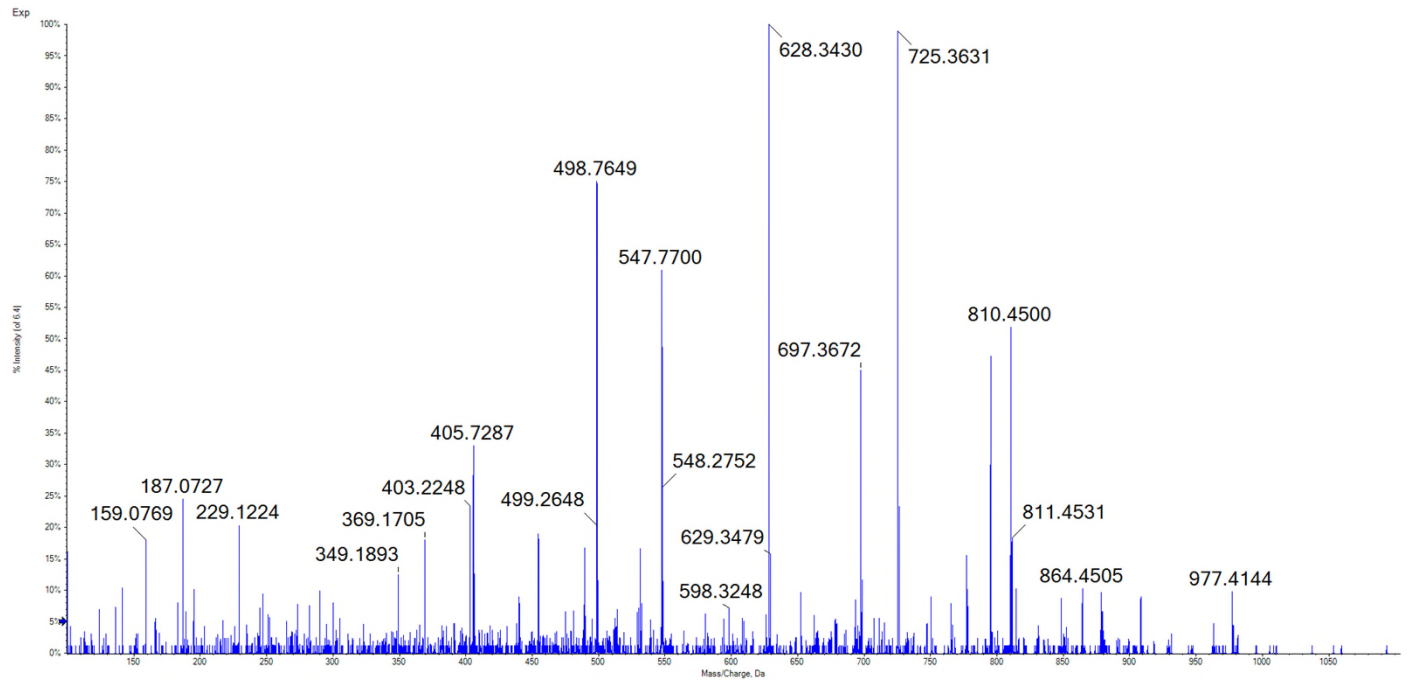
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GEI(pS)PQREV

Synthetic
Peptide



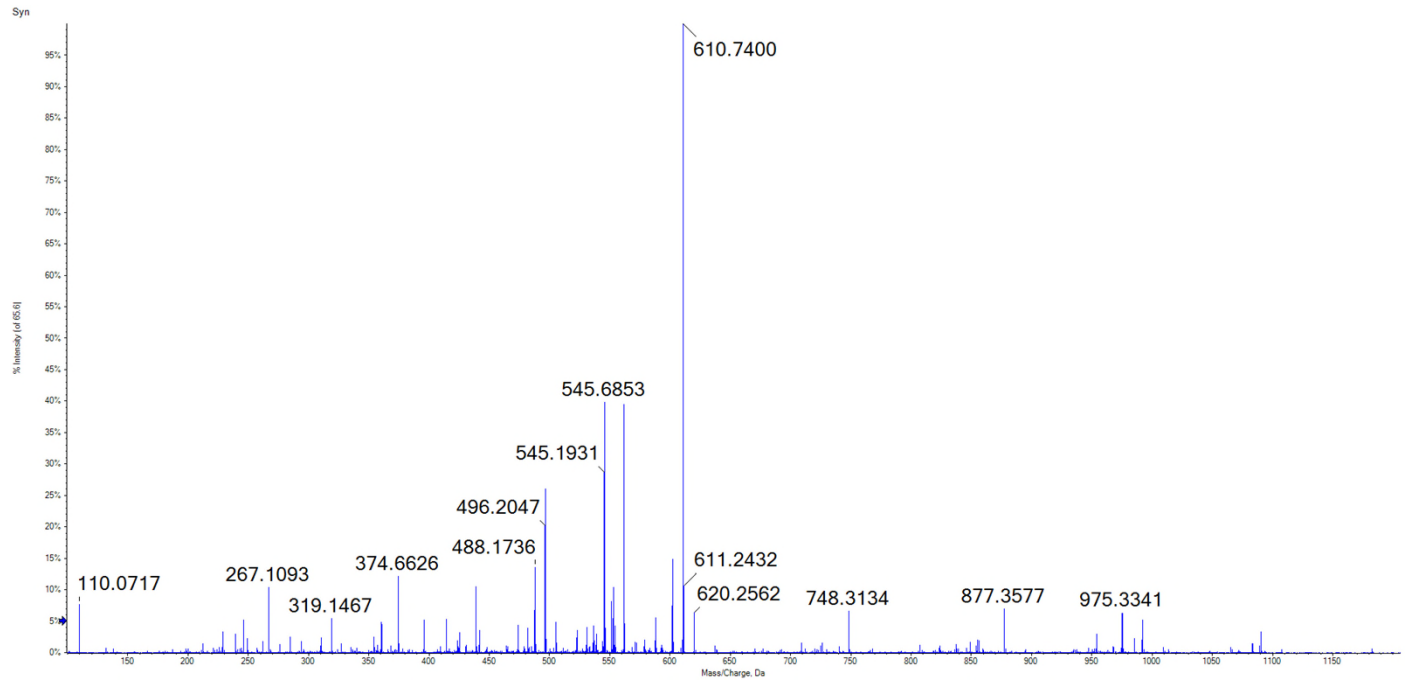
Candidate
Spectrum



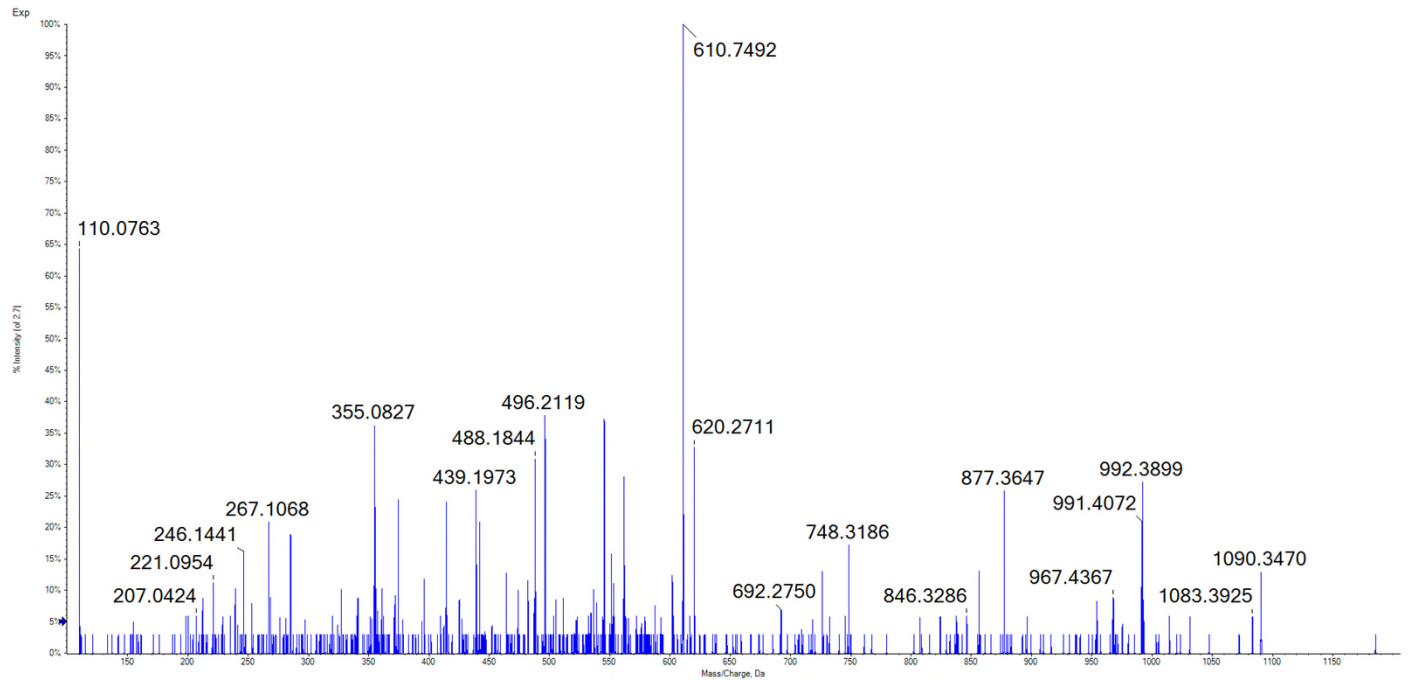
28

HEFH(pS)QENL

Synthetic
Peptide



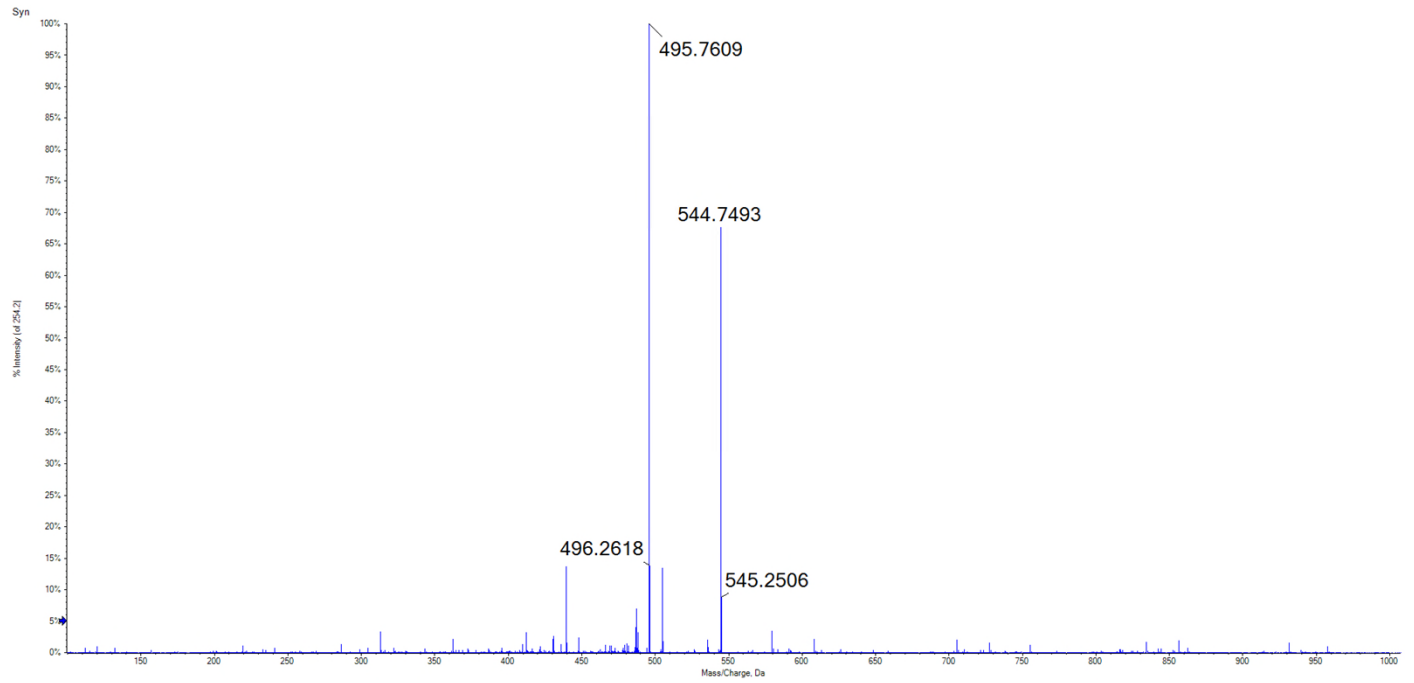
Candidate
Spectrum



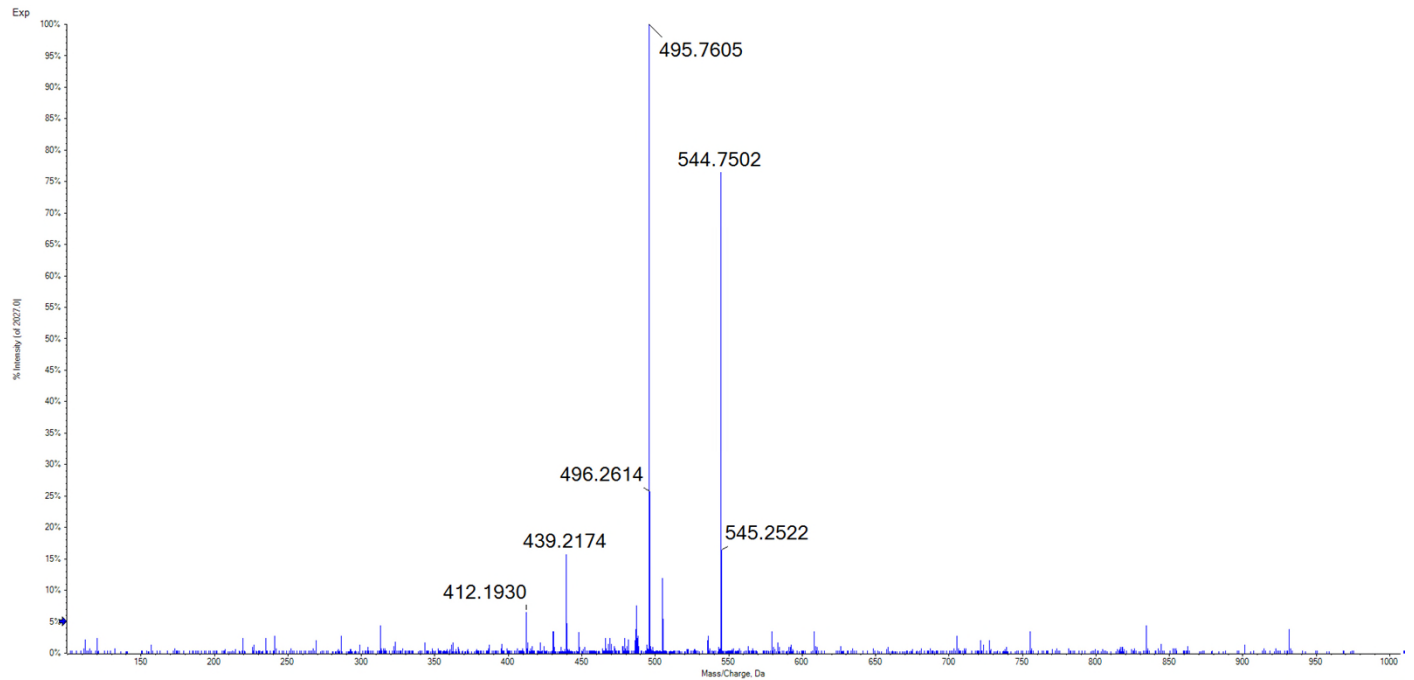
29

REG(pS)GRFSL

Synthetic
Peptide

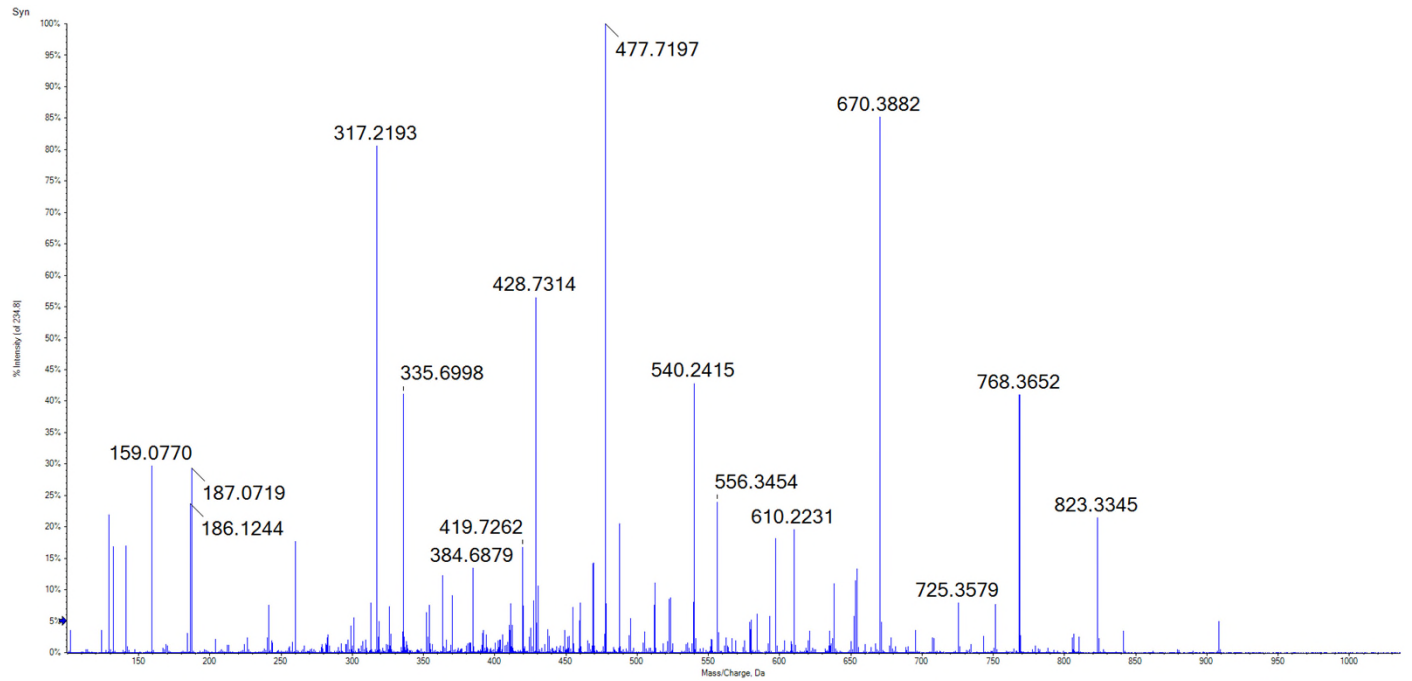


Candidate
Spectrum

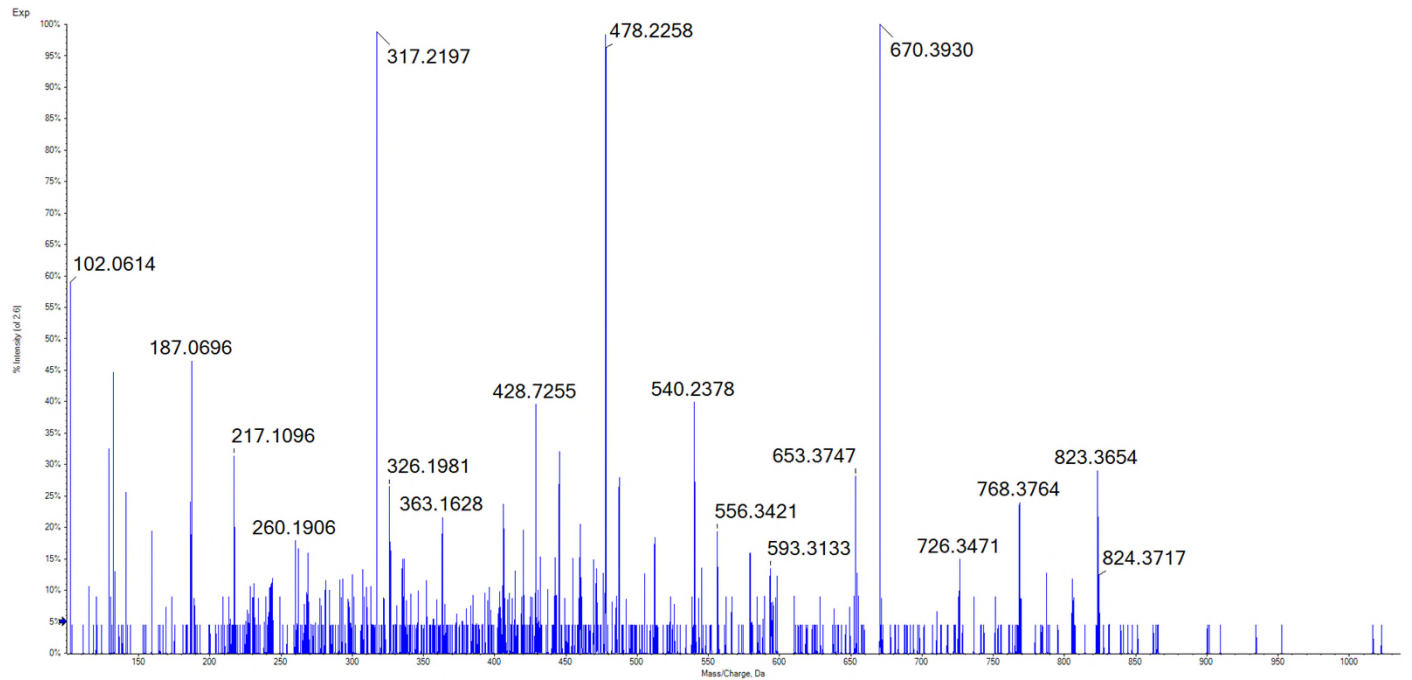


30 GEN(pS)GIGKL

Synthetic
Peptide

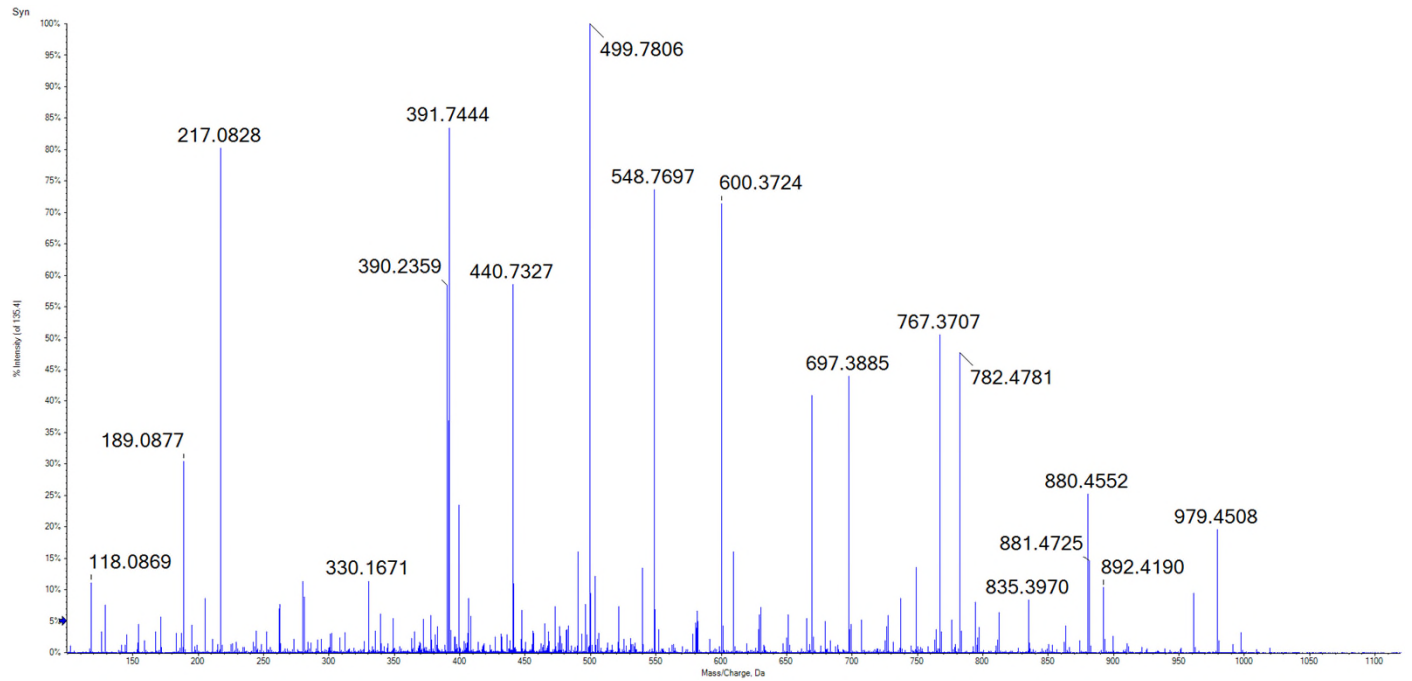


Candidate
Spectrum

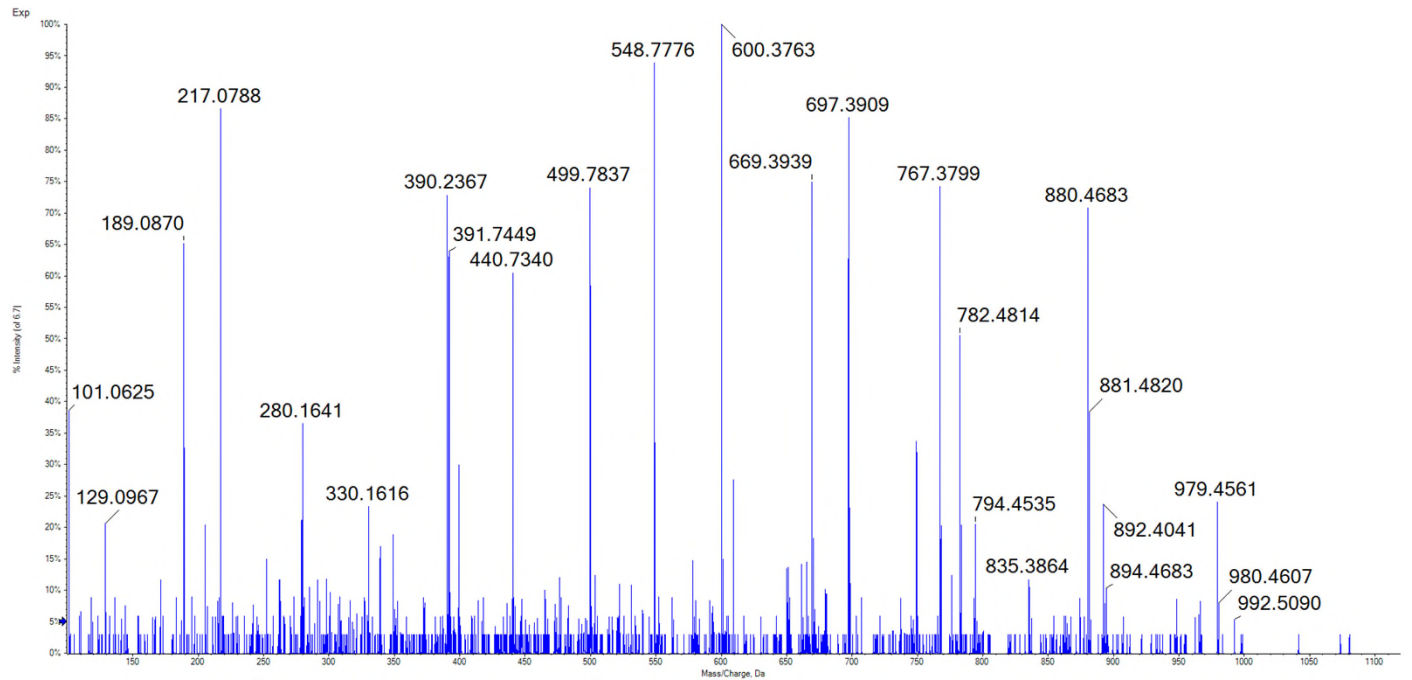


31 SEI(pS)PIKGSV

Synthetic
Peptide

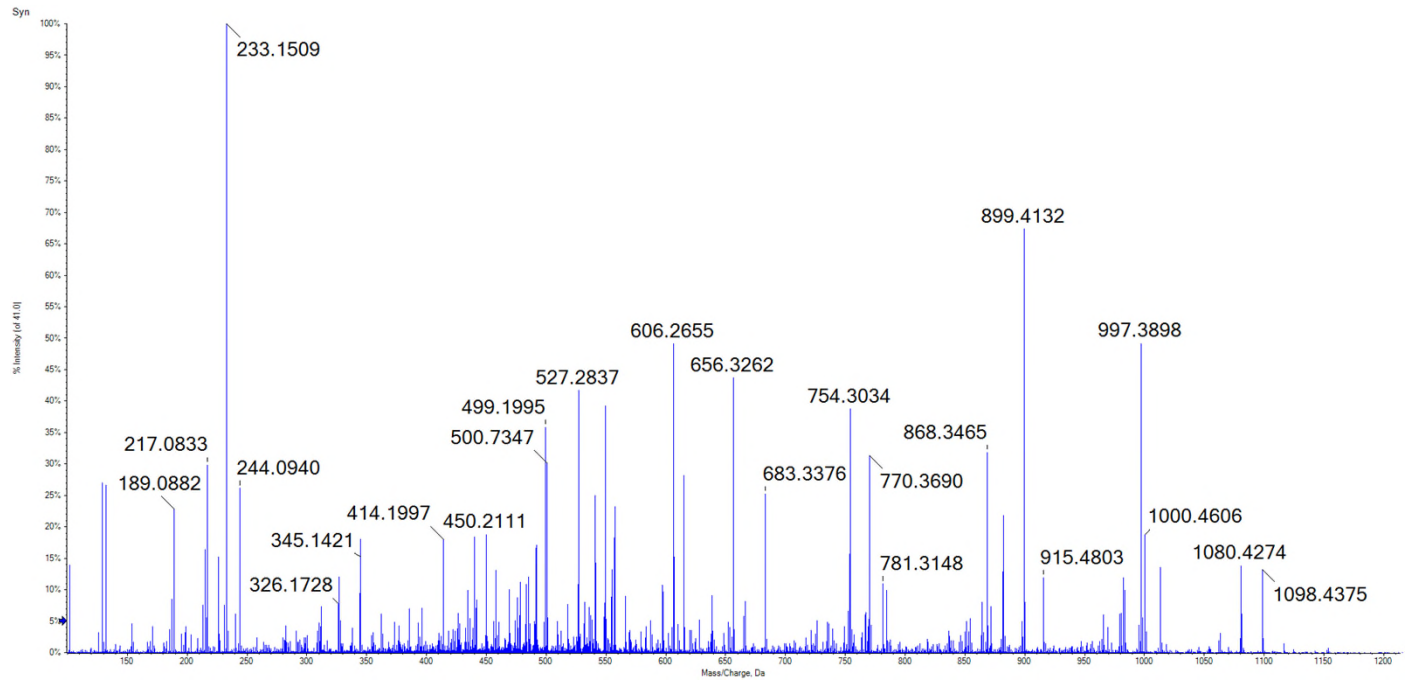


Candidate
Spectrum

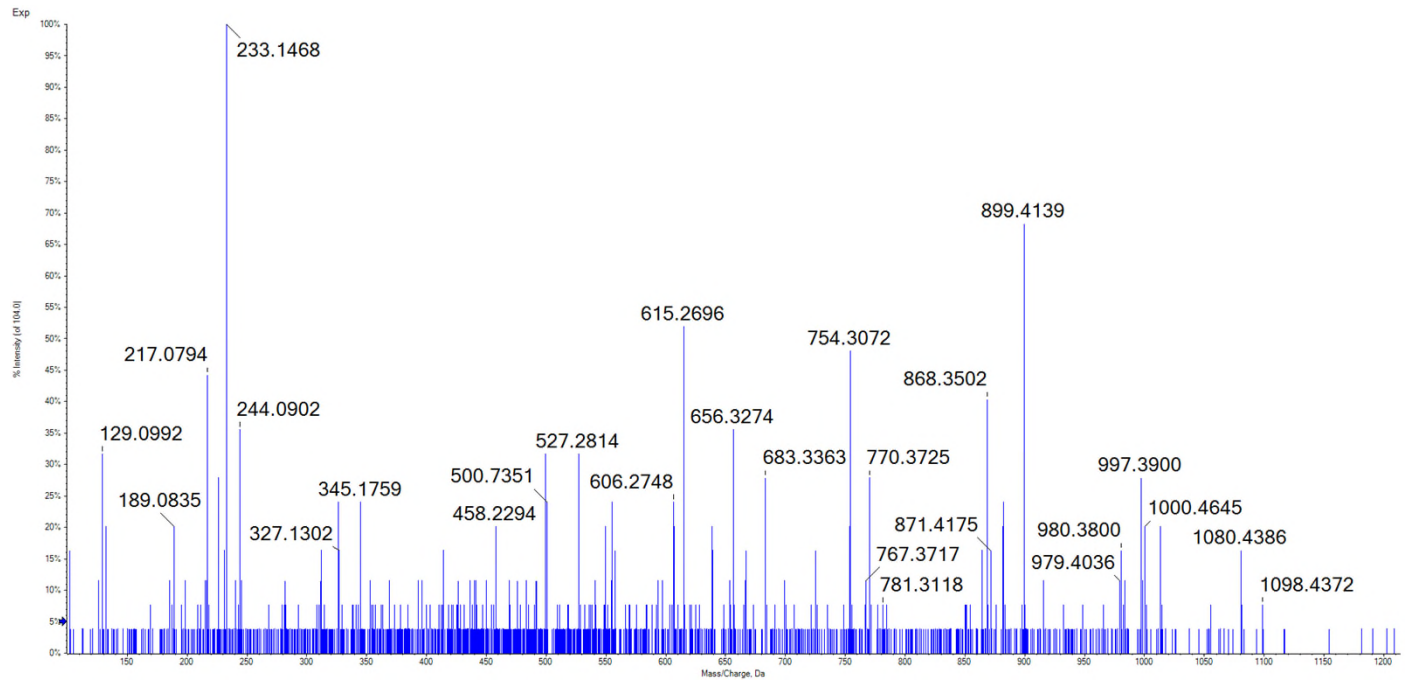


32 SEK(pS)LENETL

Synthetic
Peptide



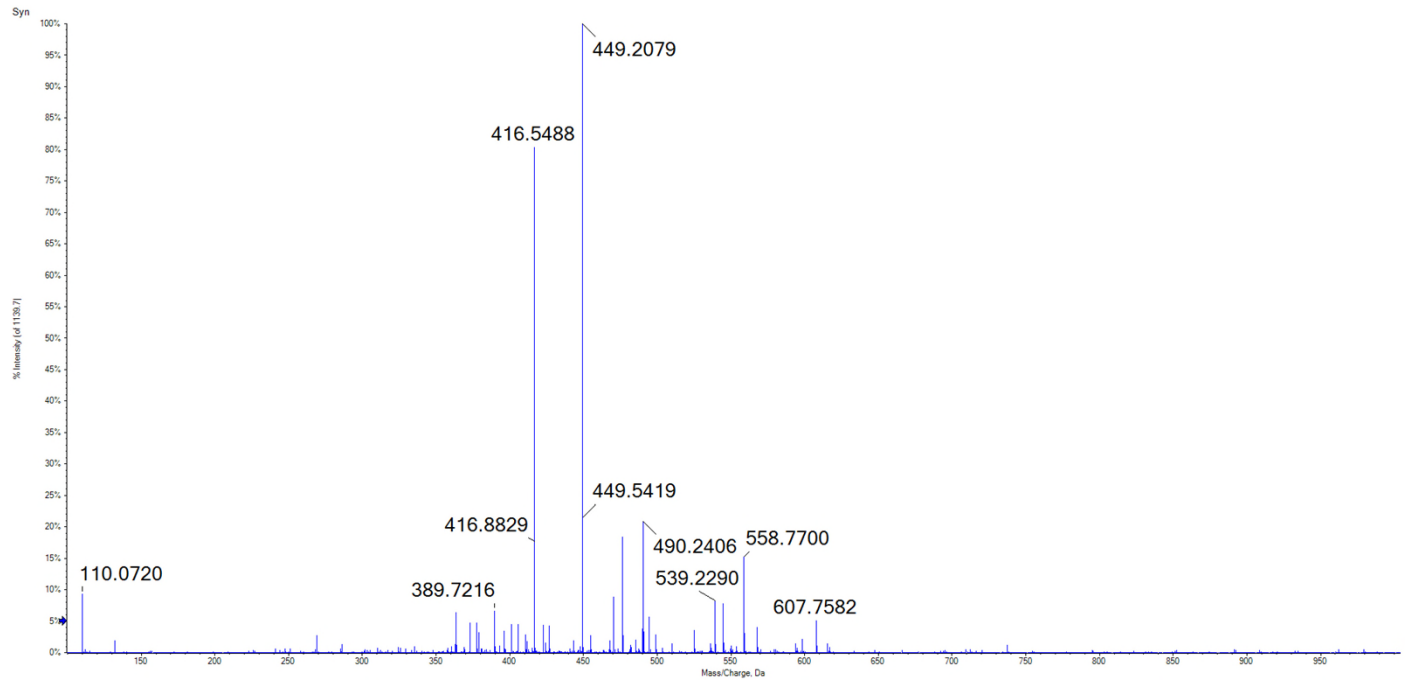
Candidate
Spectrum



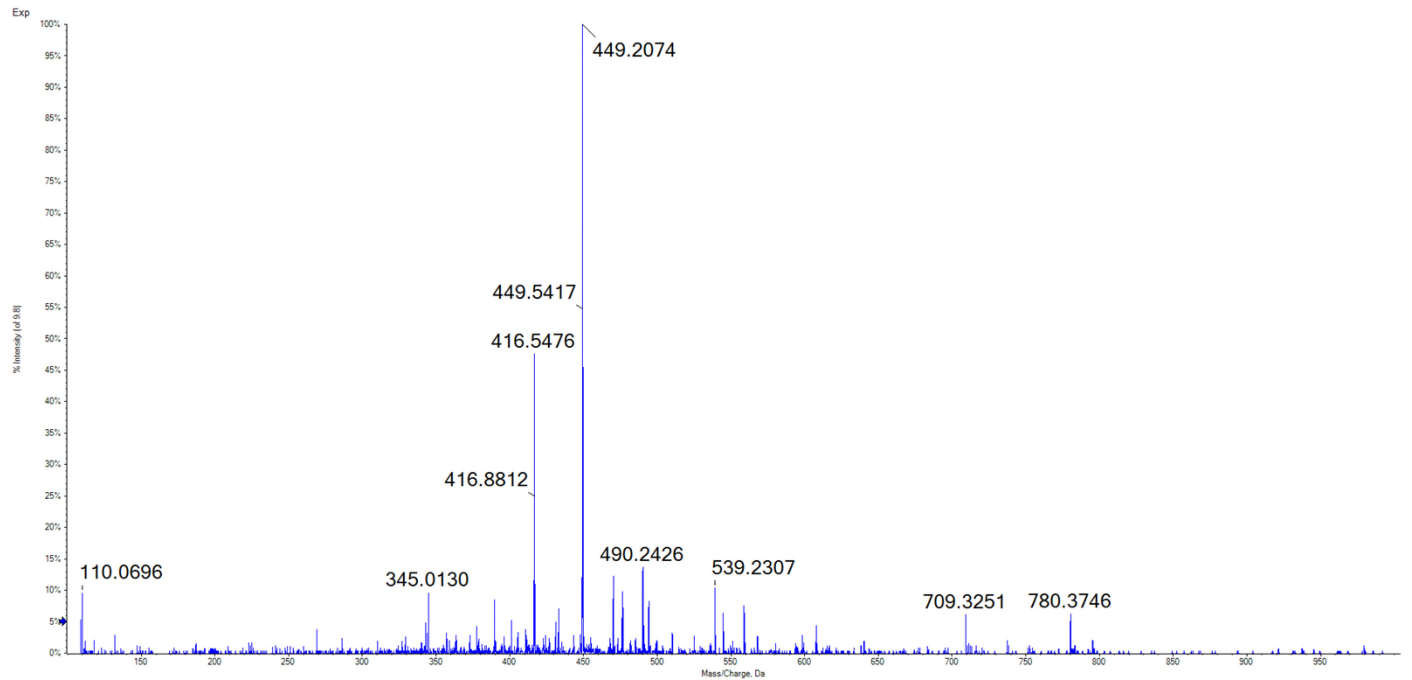
33

RED(pS)QRPGAHL

Synthetic
Peptide



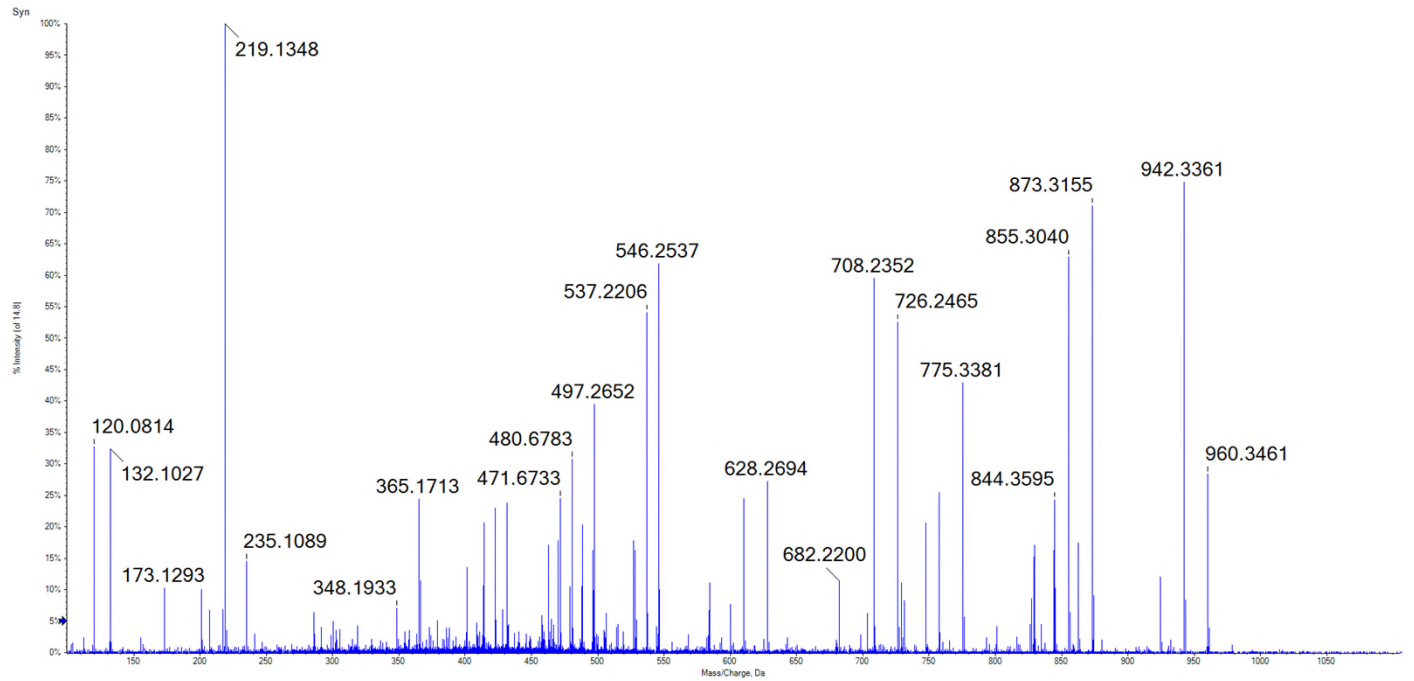
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Spectrum



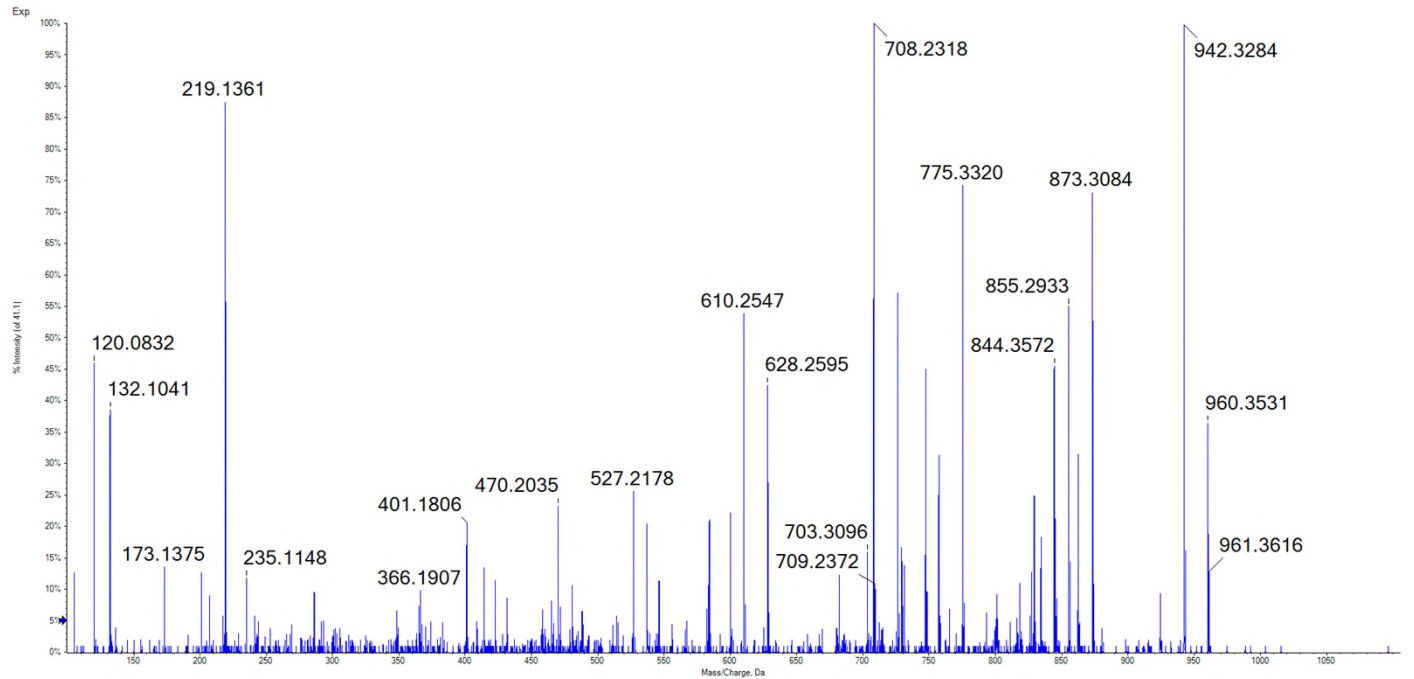
34

RED(pS)GTFSL

Synthetic
Peptide



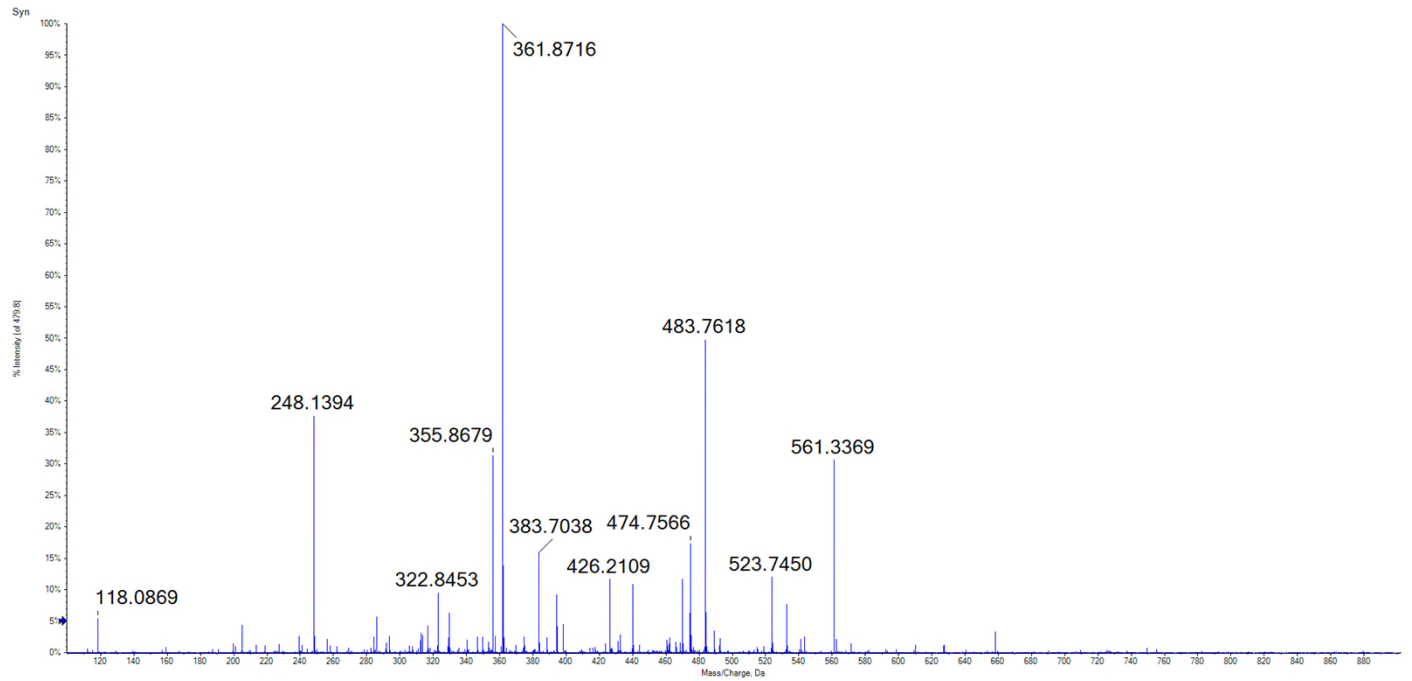
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Spectrum



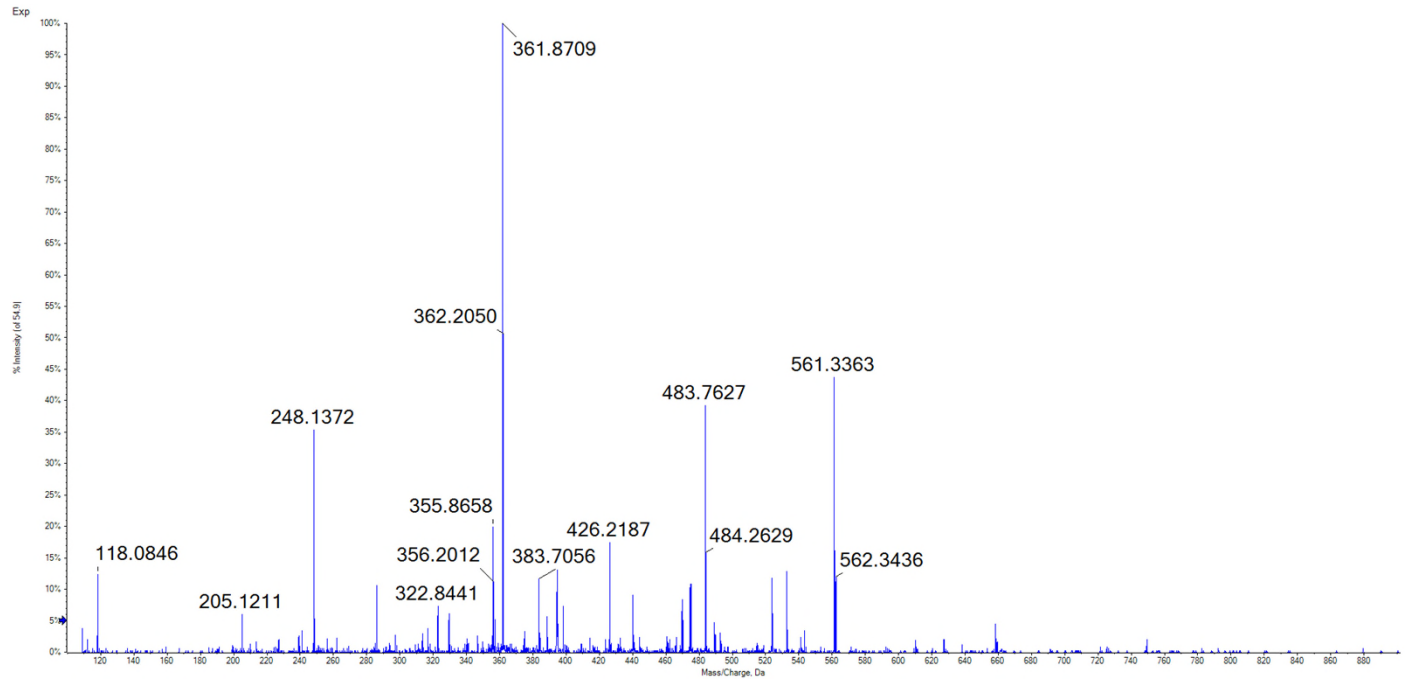
35

REA(pS)PSRLSV

Synthetic
Peptide

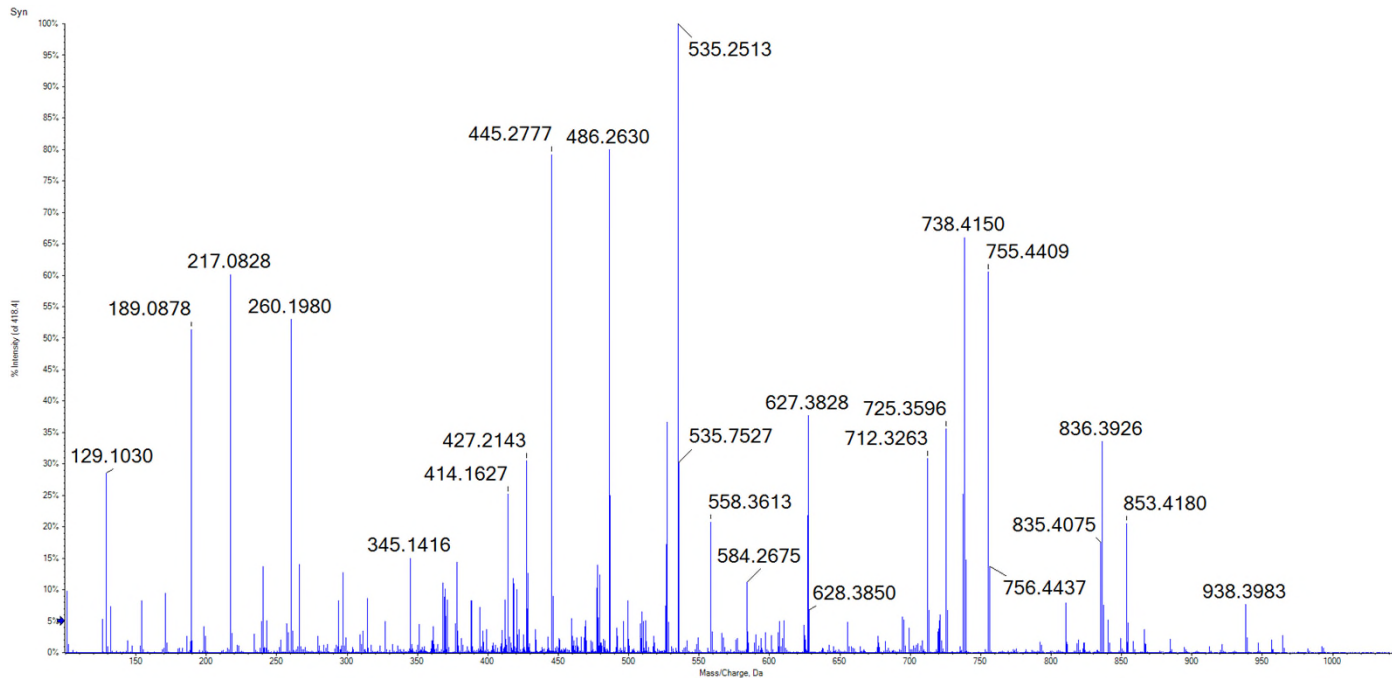


Candidate
Spectrum

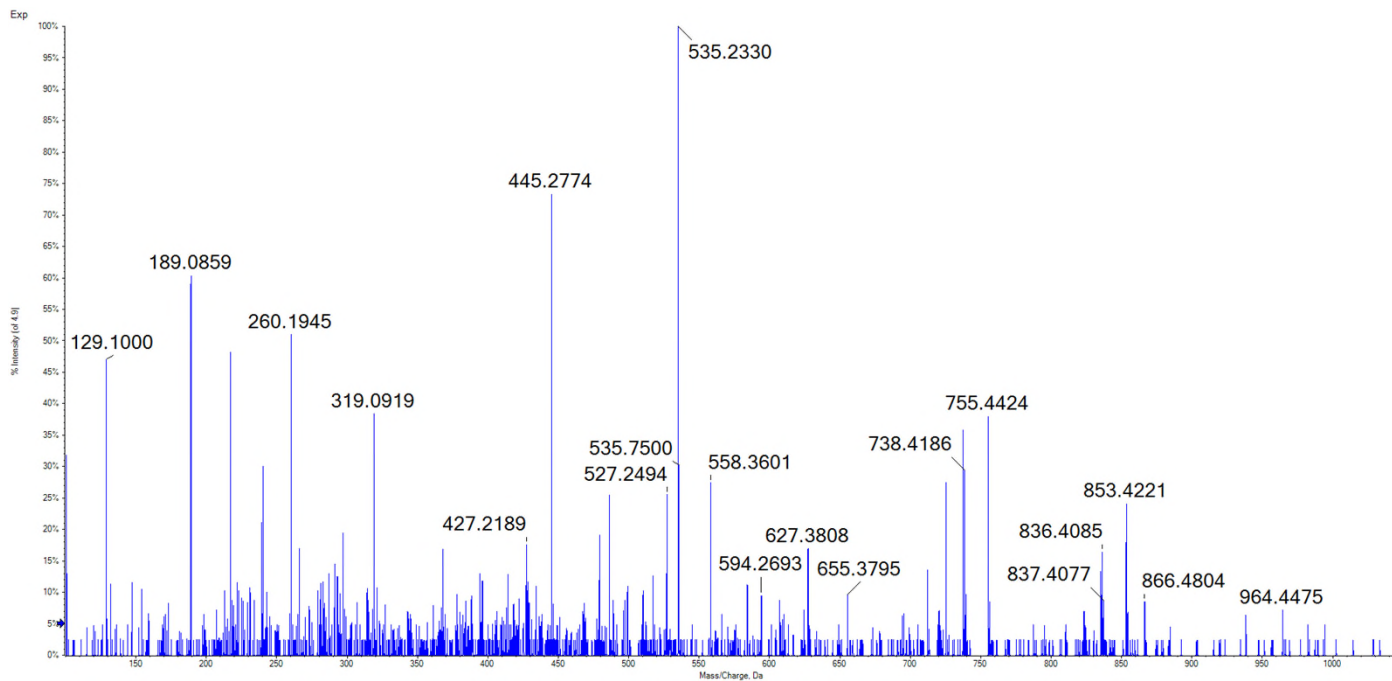


36 SEQ(pS)LGQKL

Synthetic
Peptide

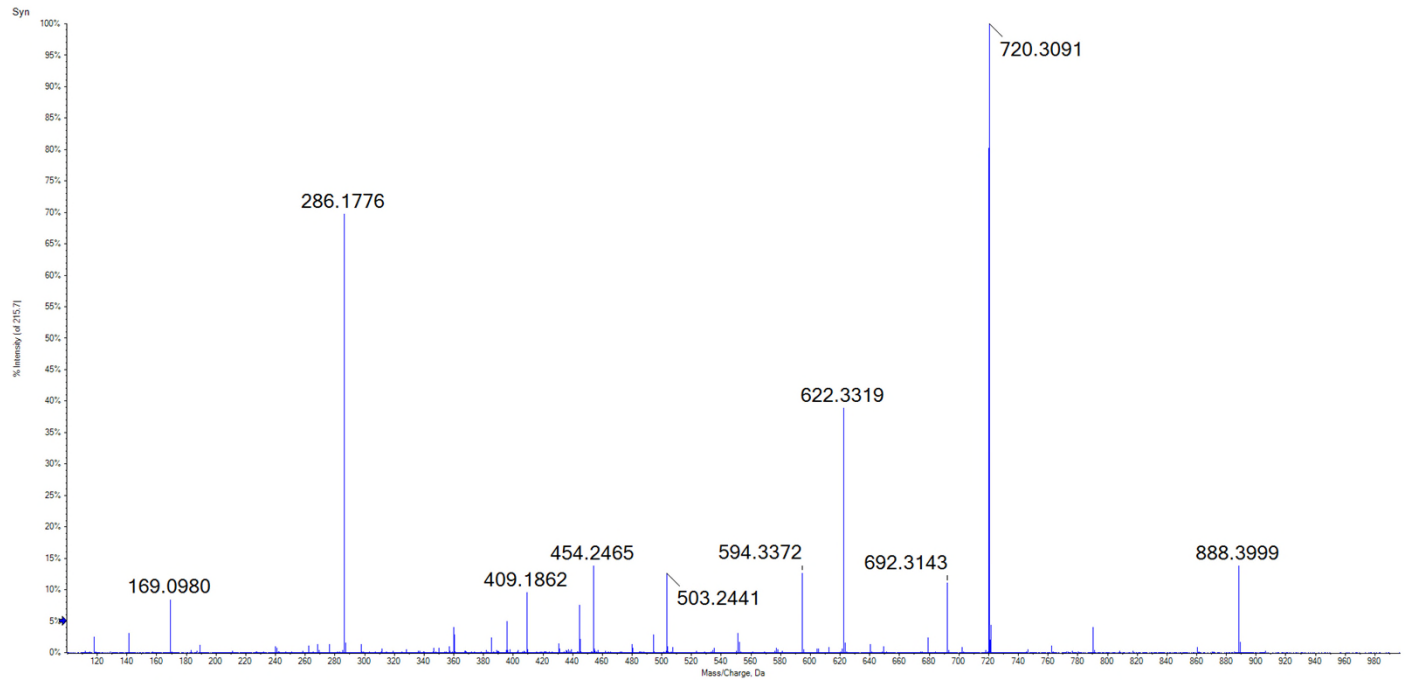


Candidate
Spectrum

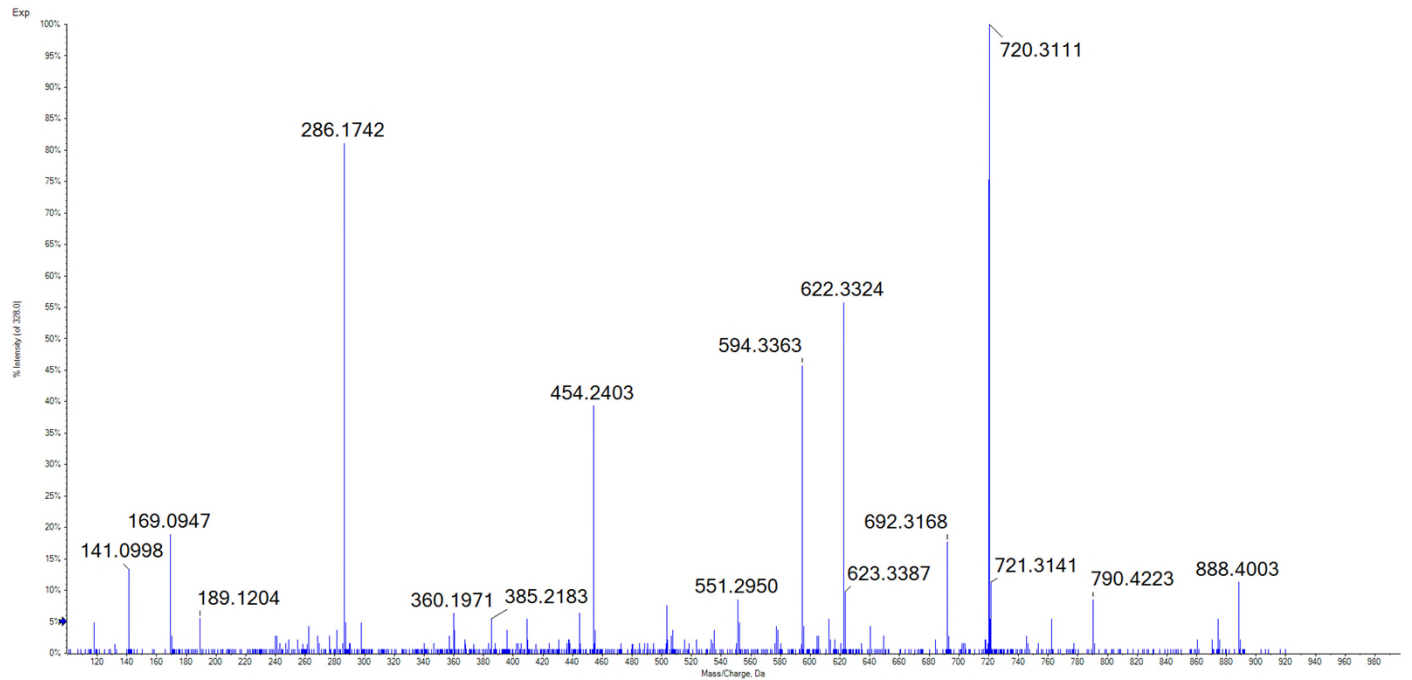


37 REV(pS)PAPAV

Synthetic
Peptide



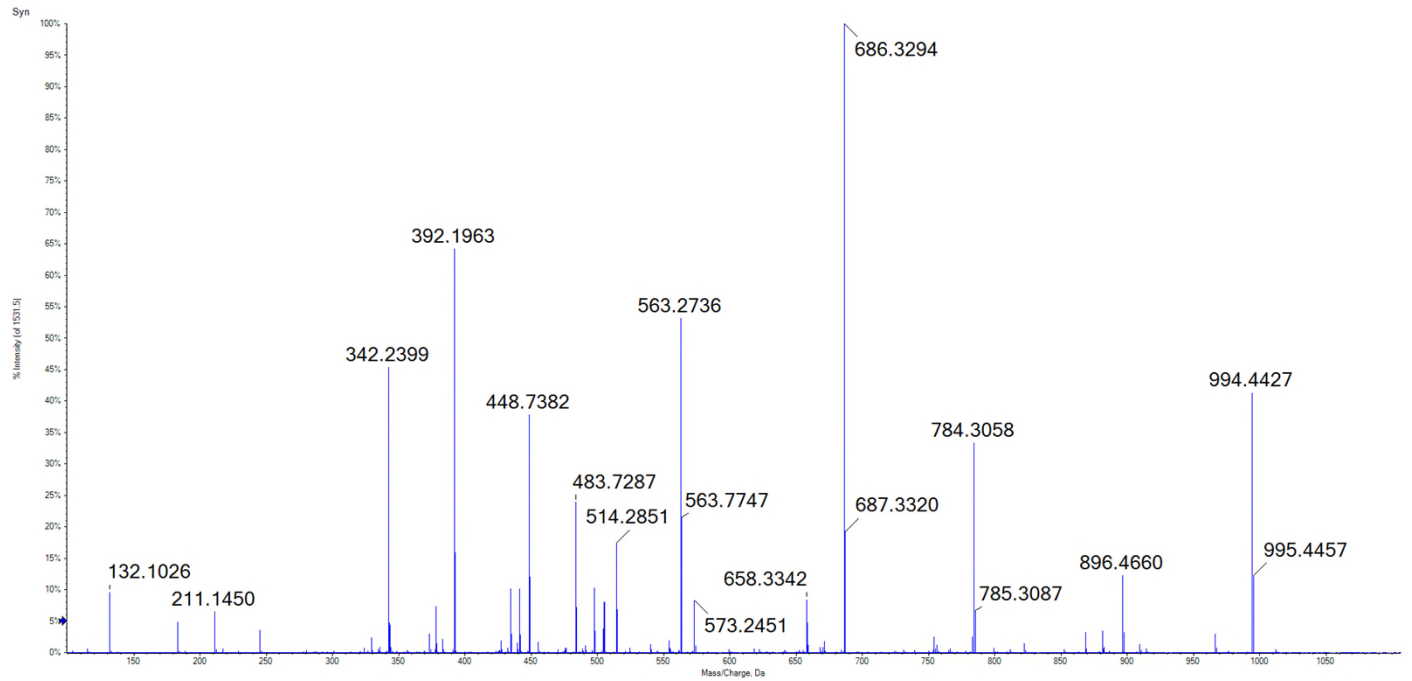
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Spectrum



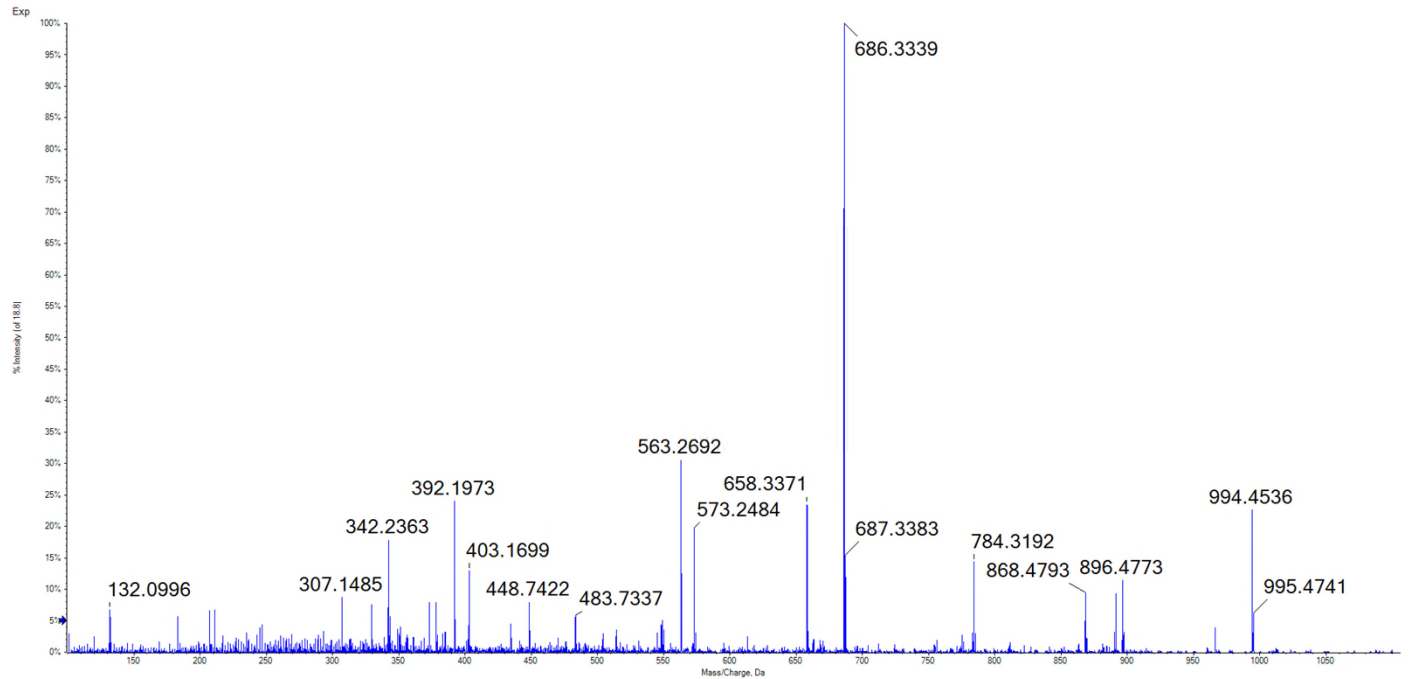
38

SERM(pS)LPLL

Synthetic
Peptide

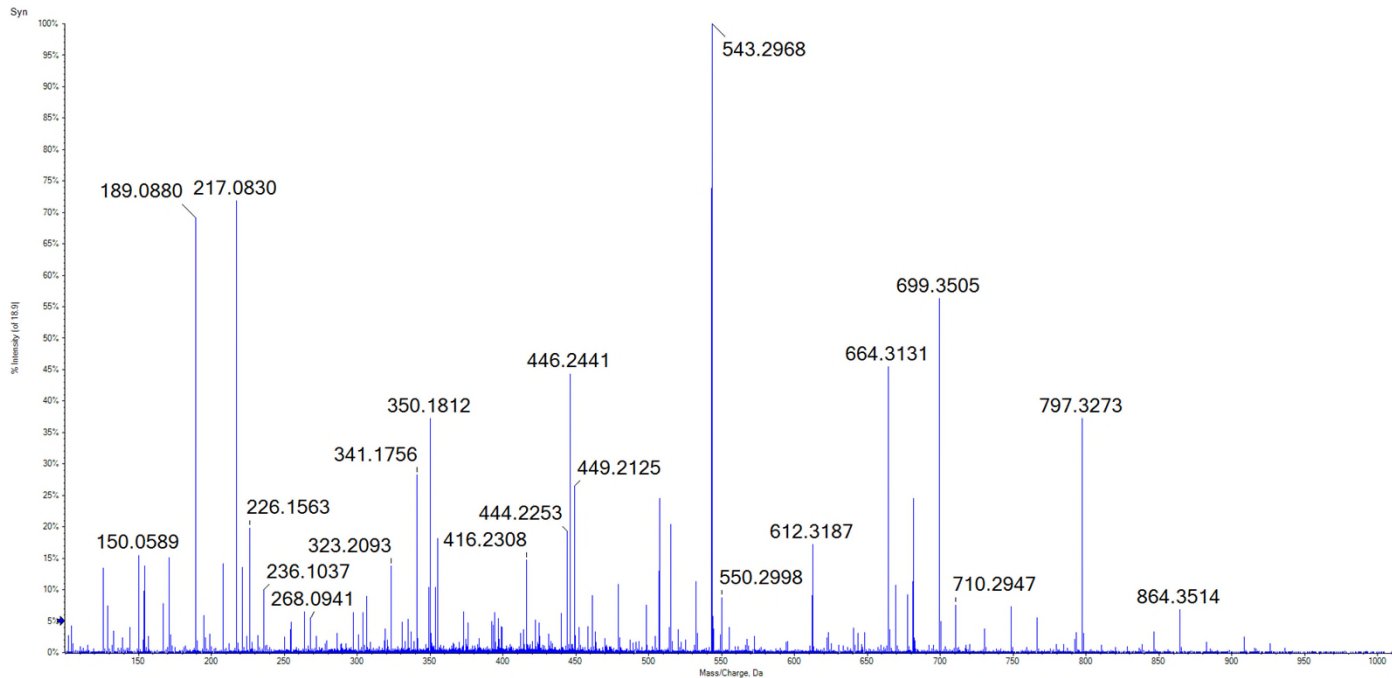


Candidate
Spectrum

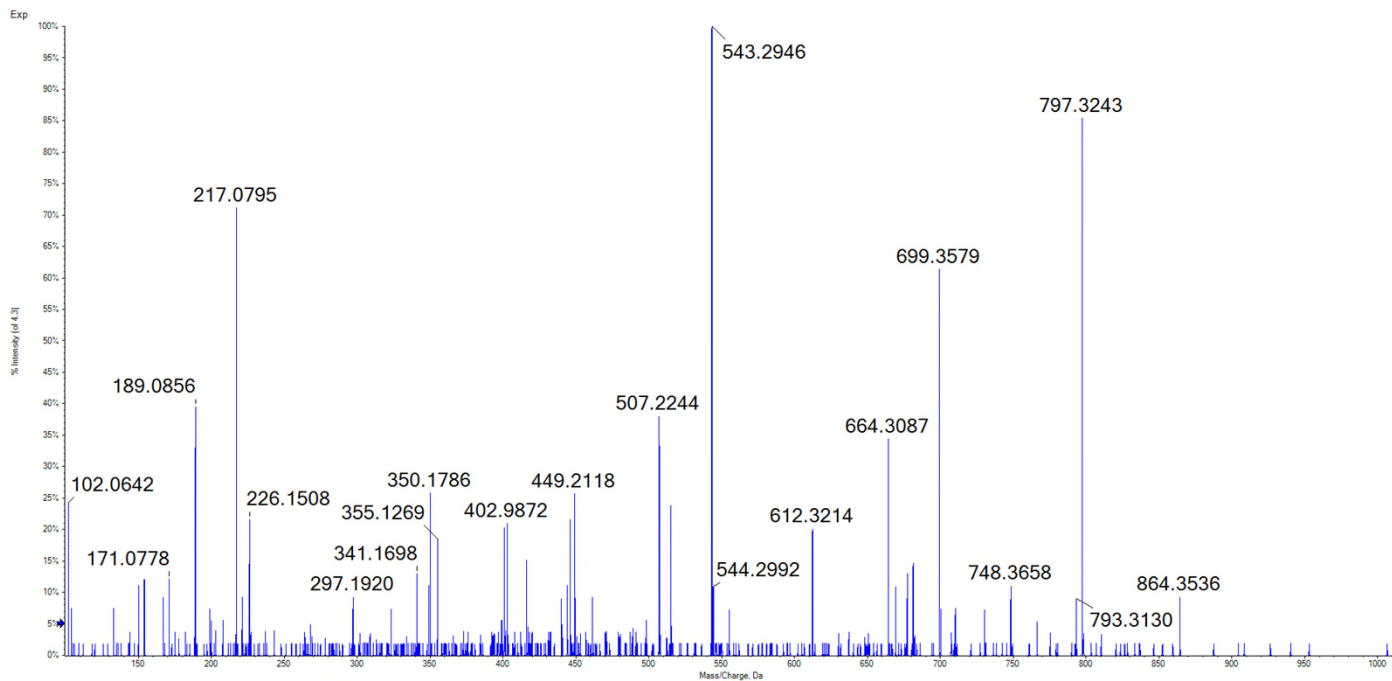


39 SES(pS)PPKAM

Synthetic
Peptide

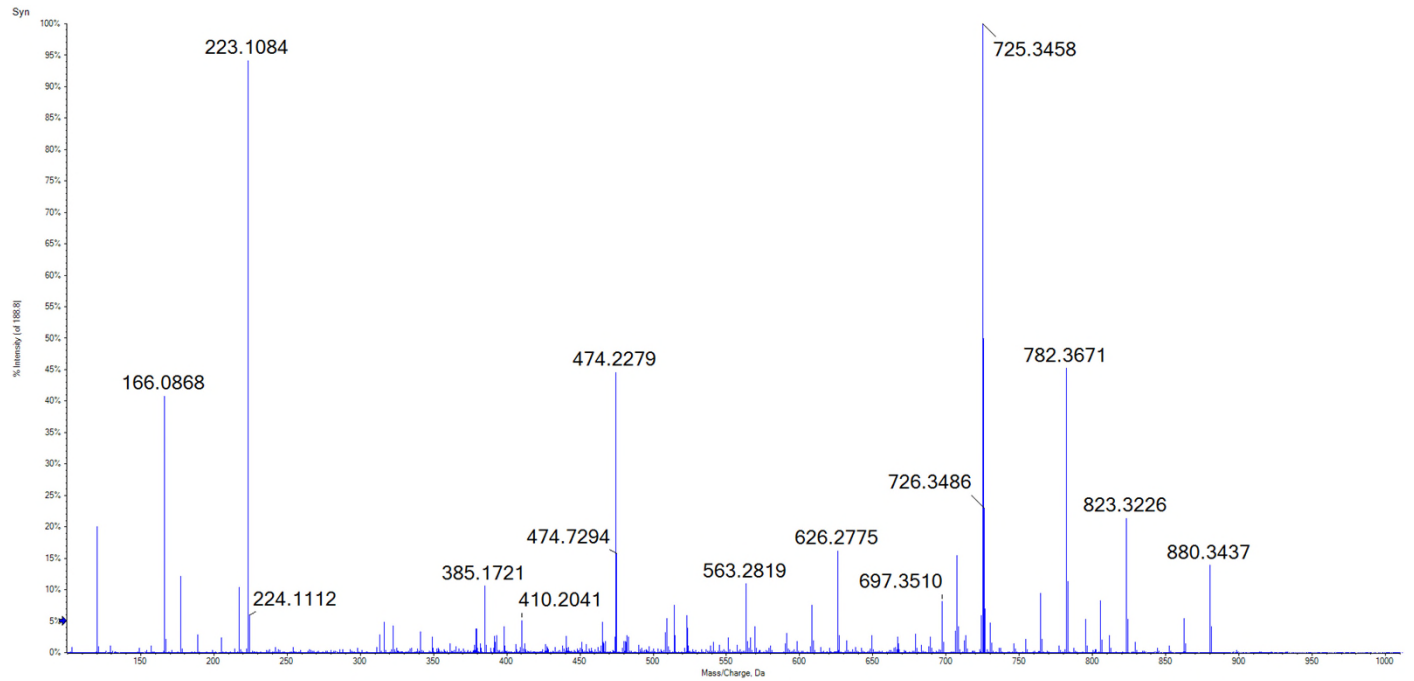


Candidate
Spectrum

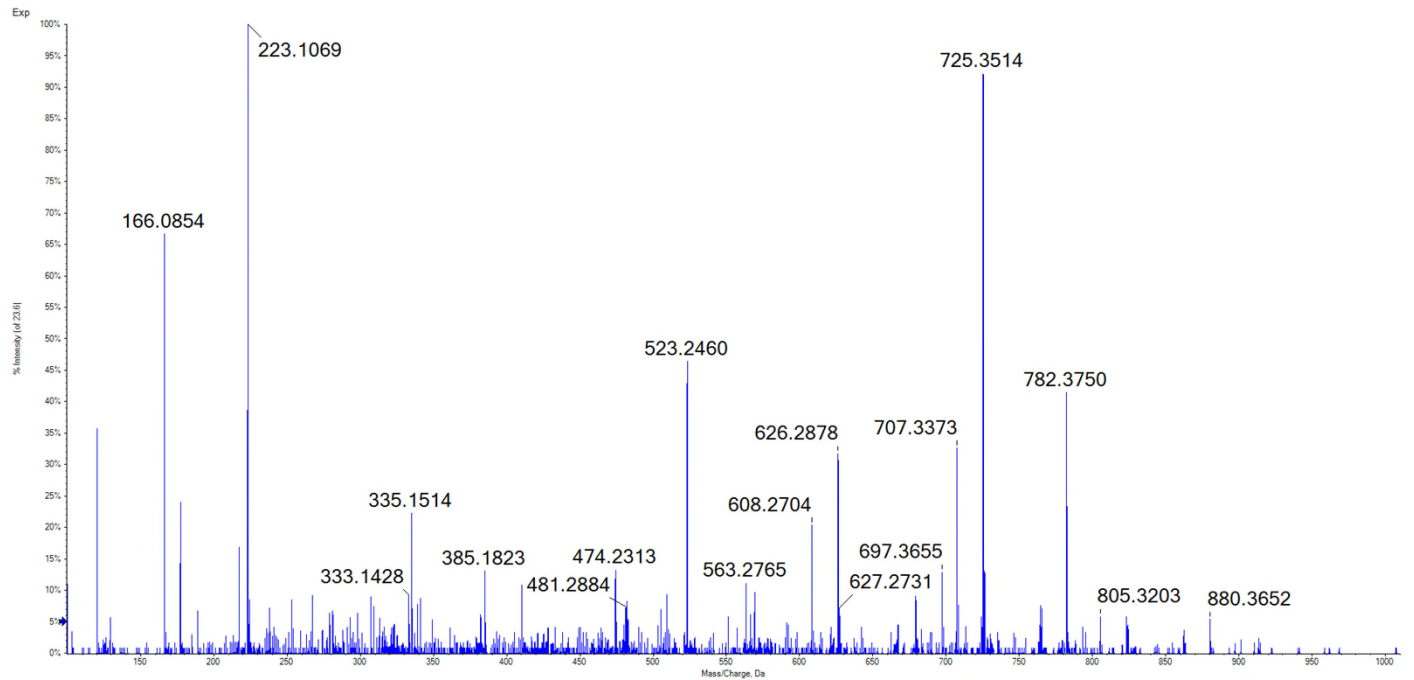


40 SEV(pS)PSGVGF

Synthetic
Peptide



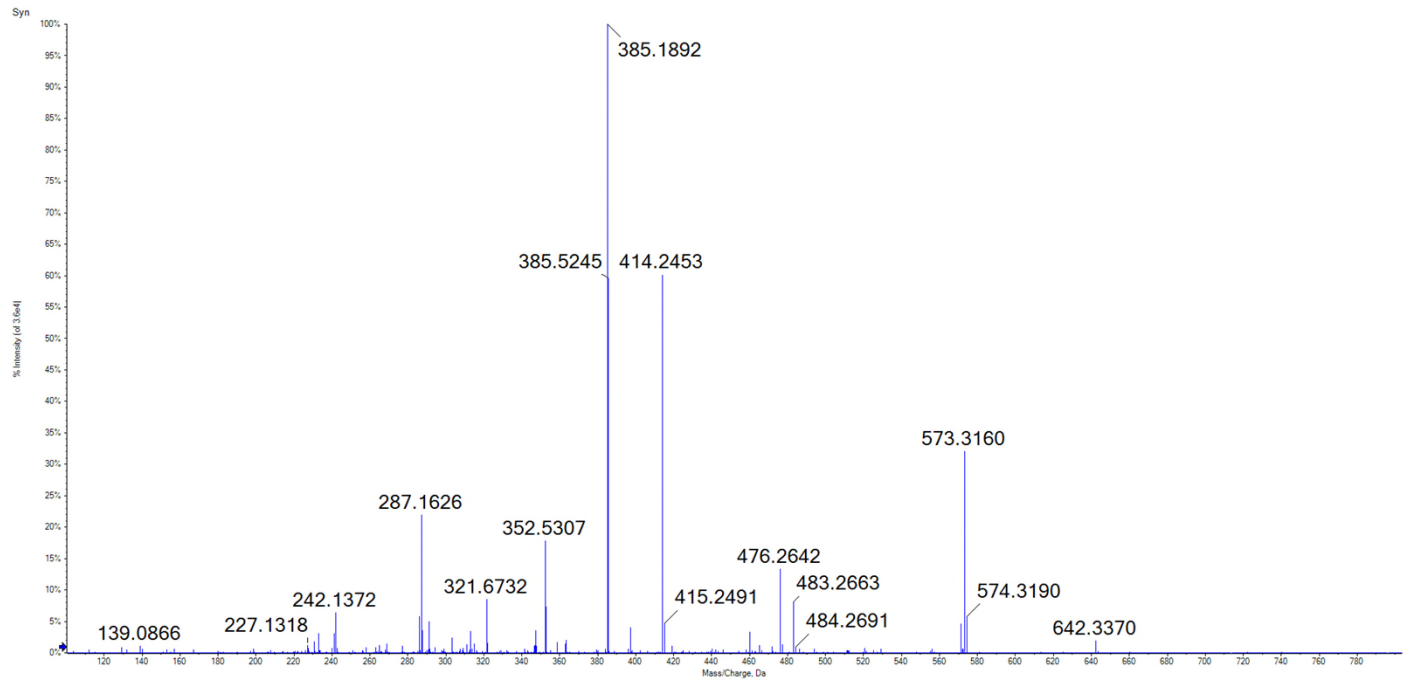
Candidate
Spectrum



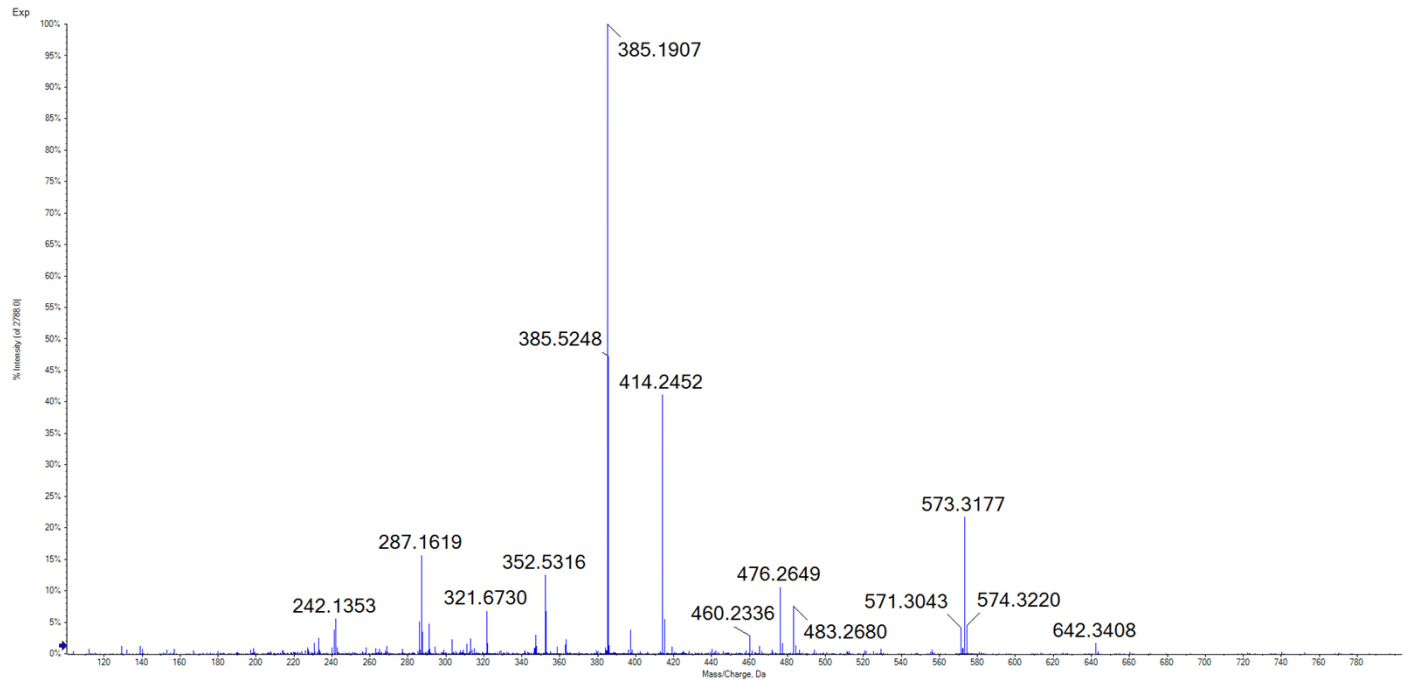
41

REK(pS)PGRML

Synthetic
Peptide



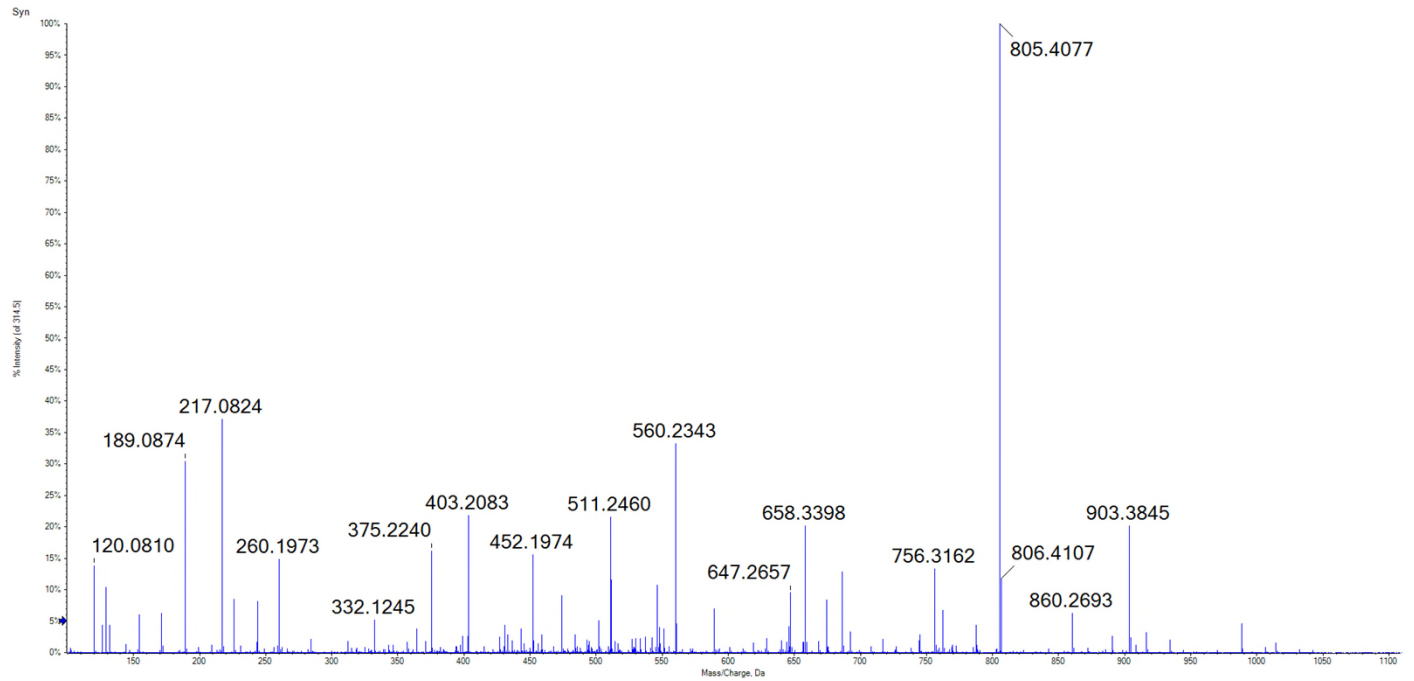
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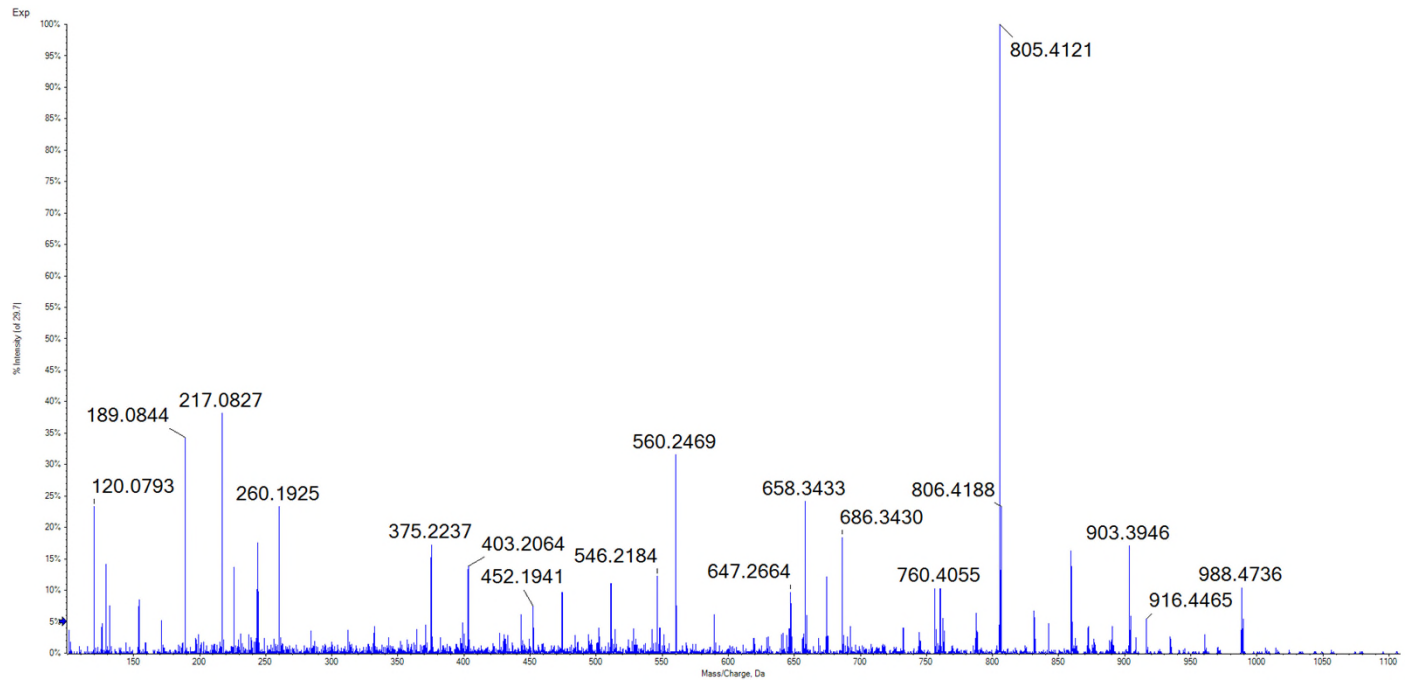
42

SEF(pS)DVDKL

Synthetic
Peptide



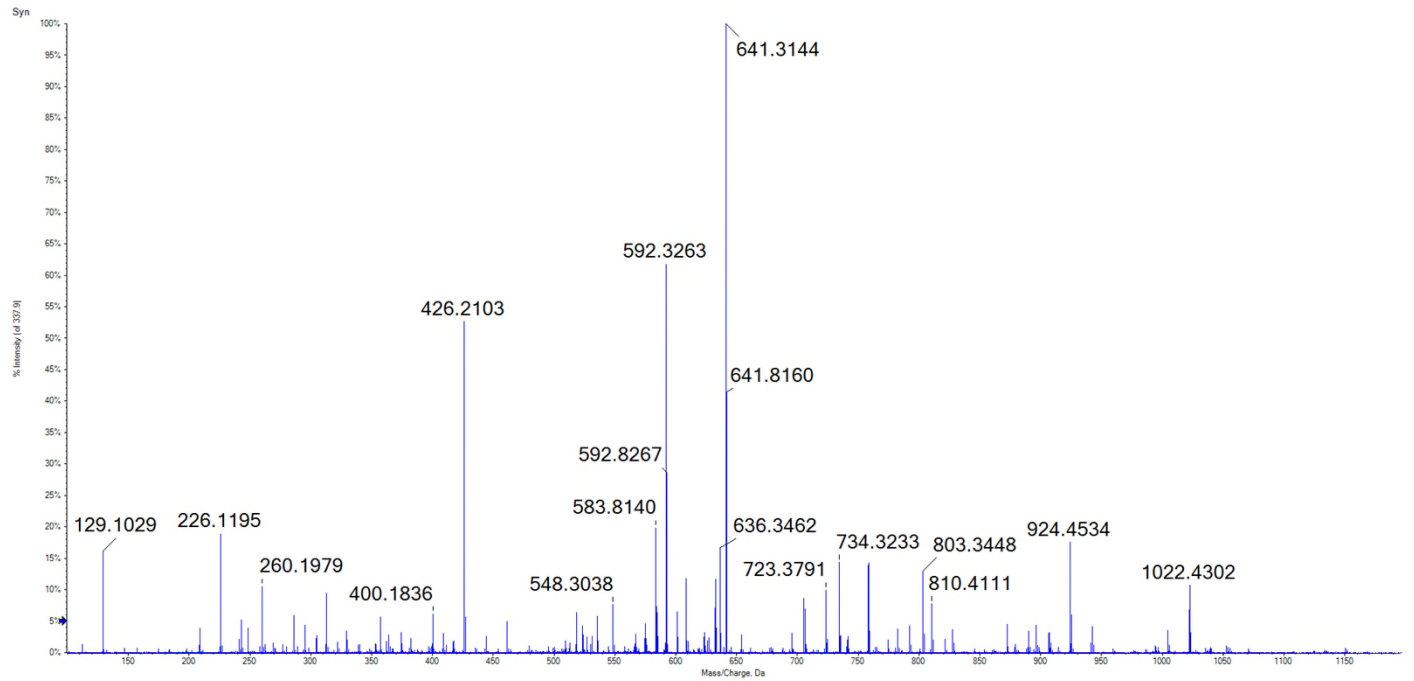
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Spectrum



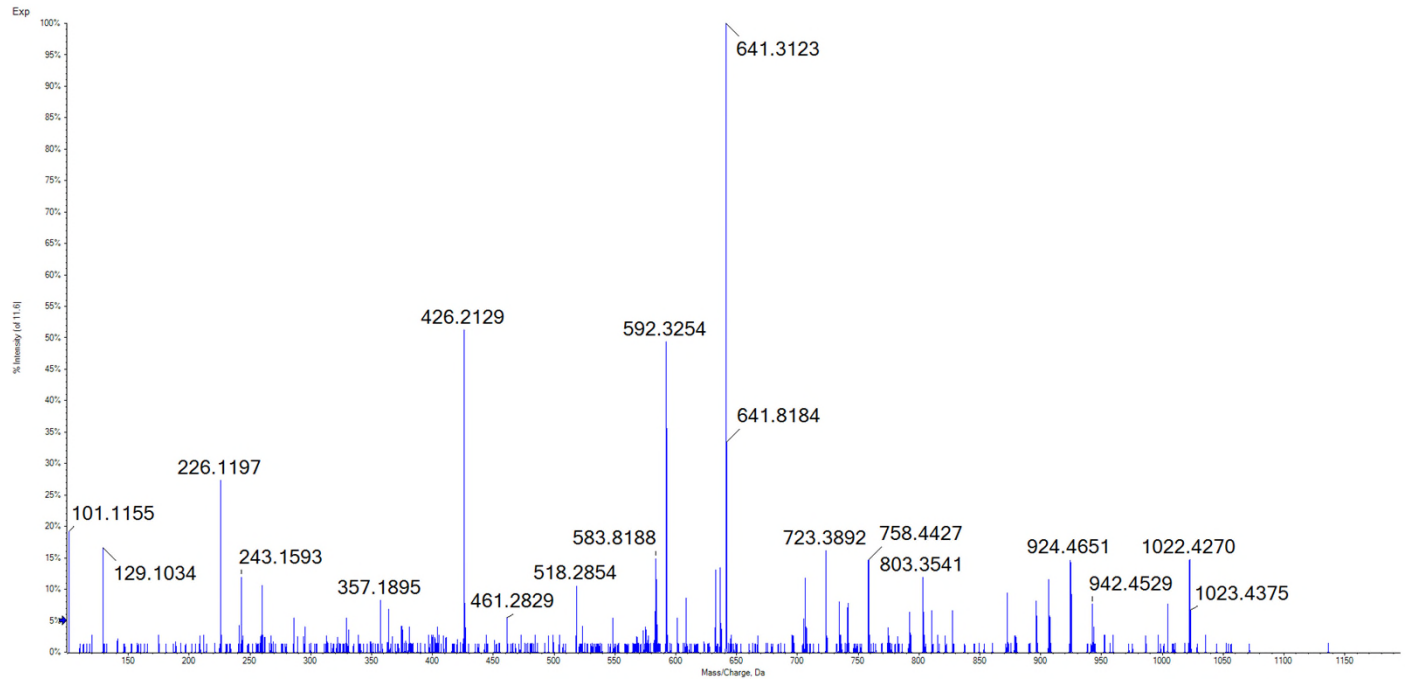
43

REA(pS)PLSSNKL

Synthetic
Peptide



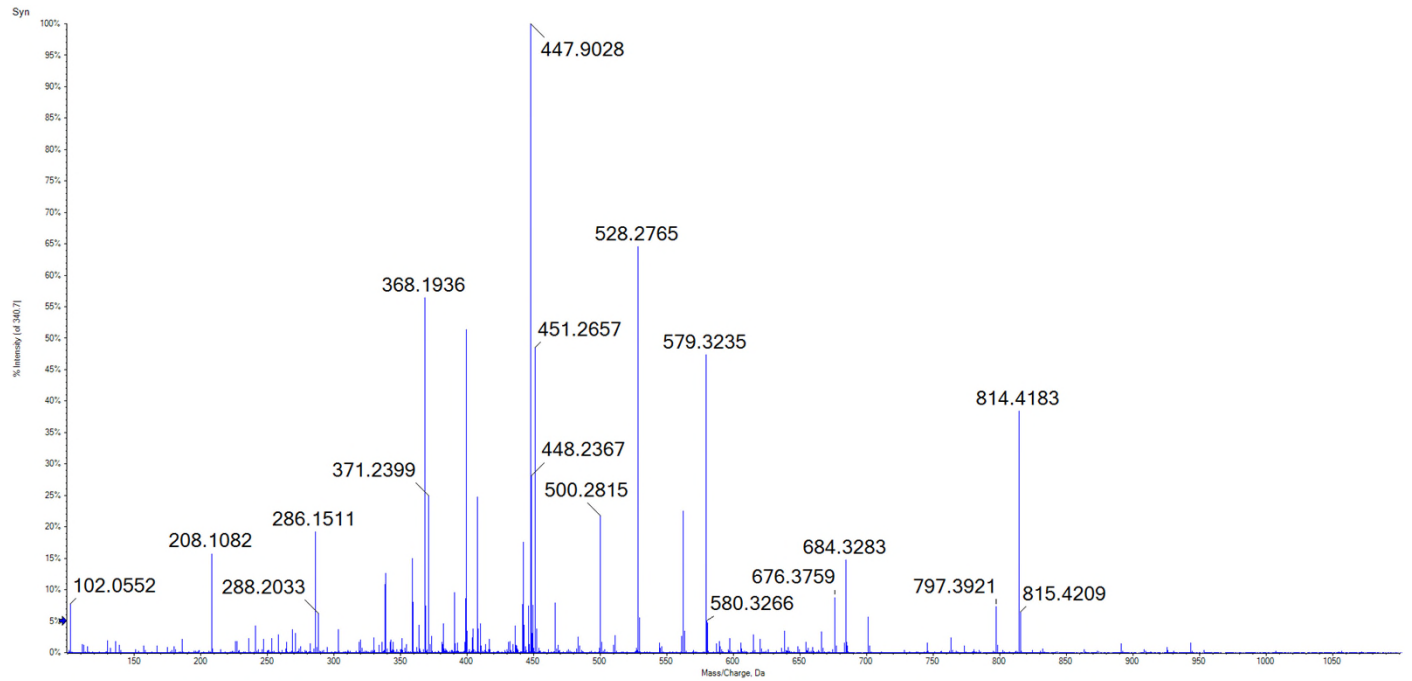
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Spectrum



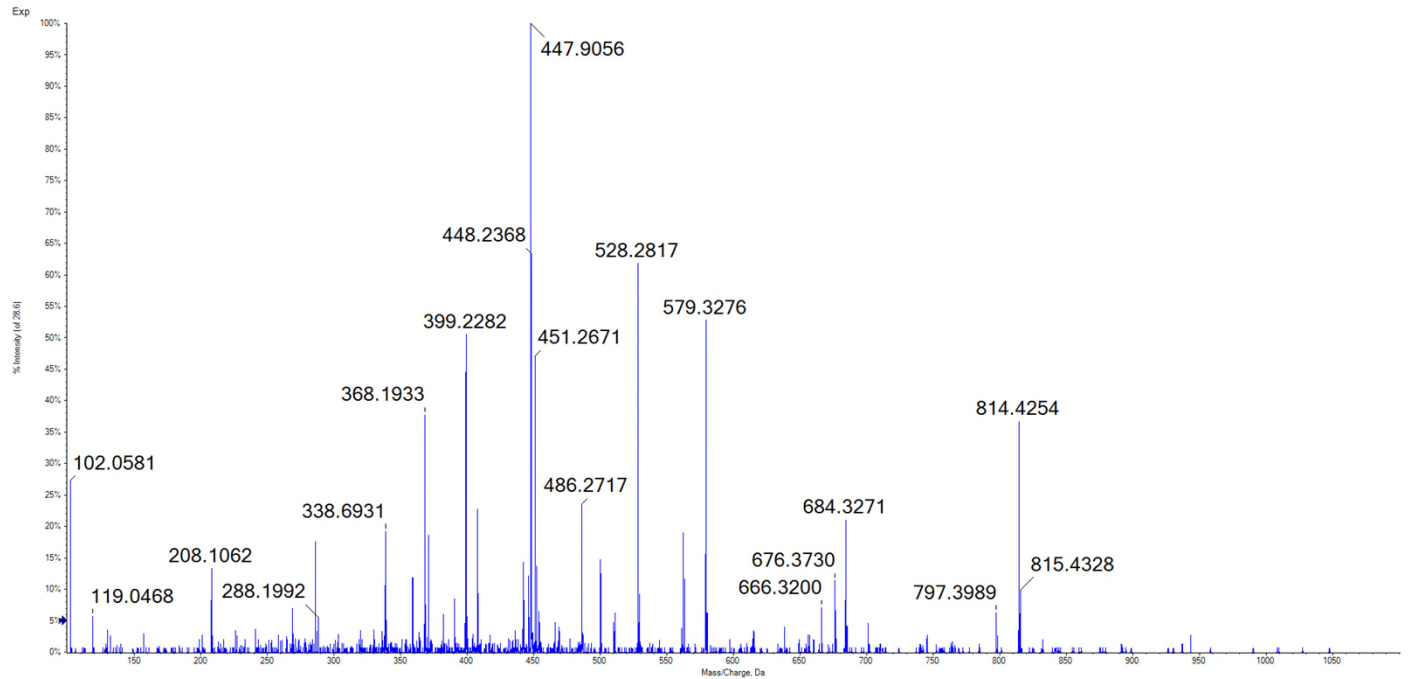
44

REIES(pS)PQYRL

Synthetic
Peptide



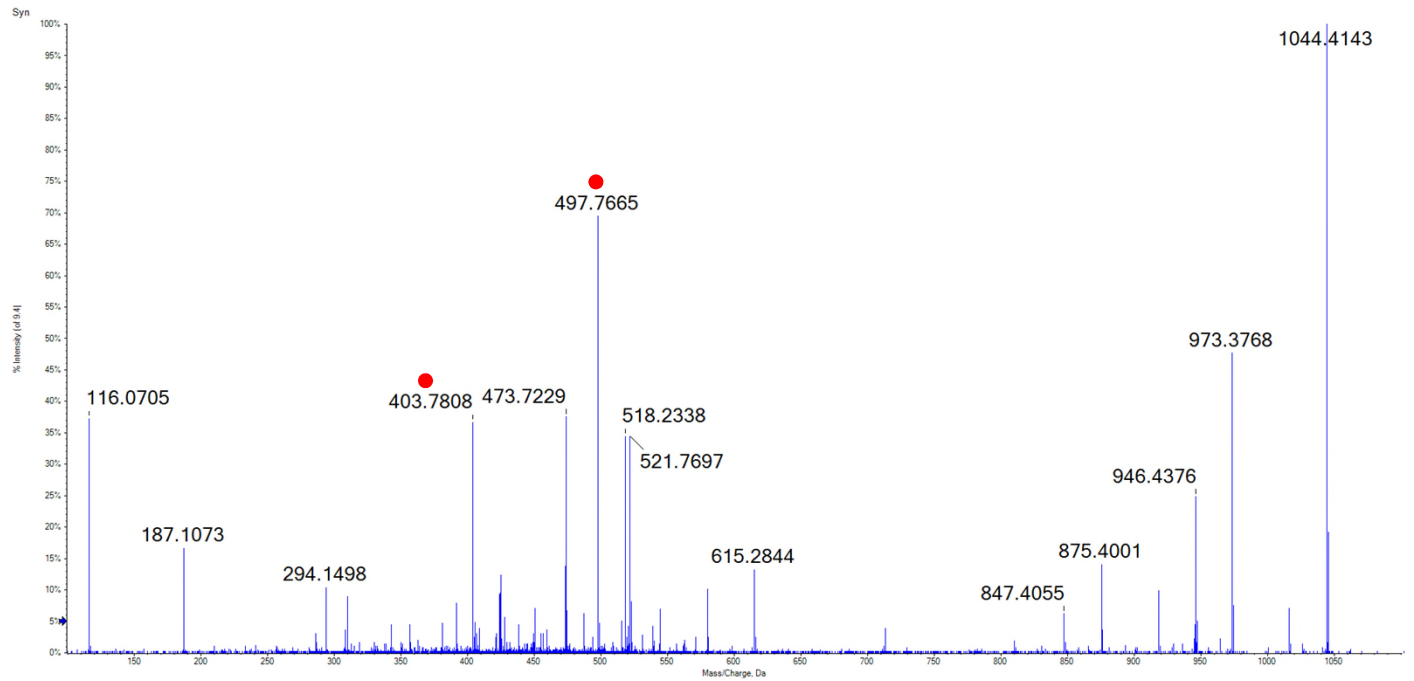
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Spectrum



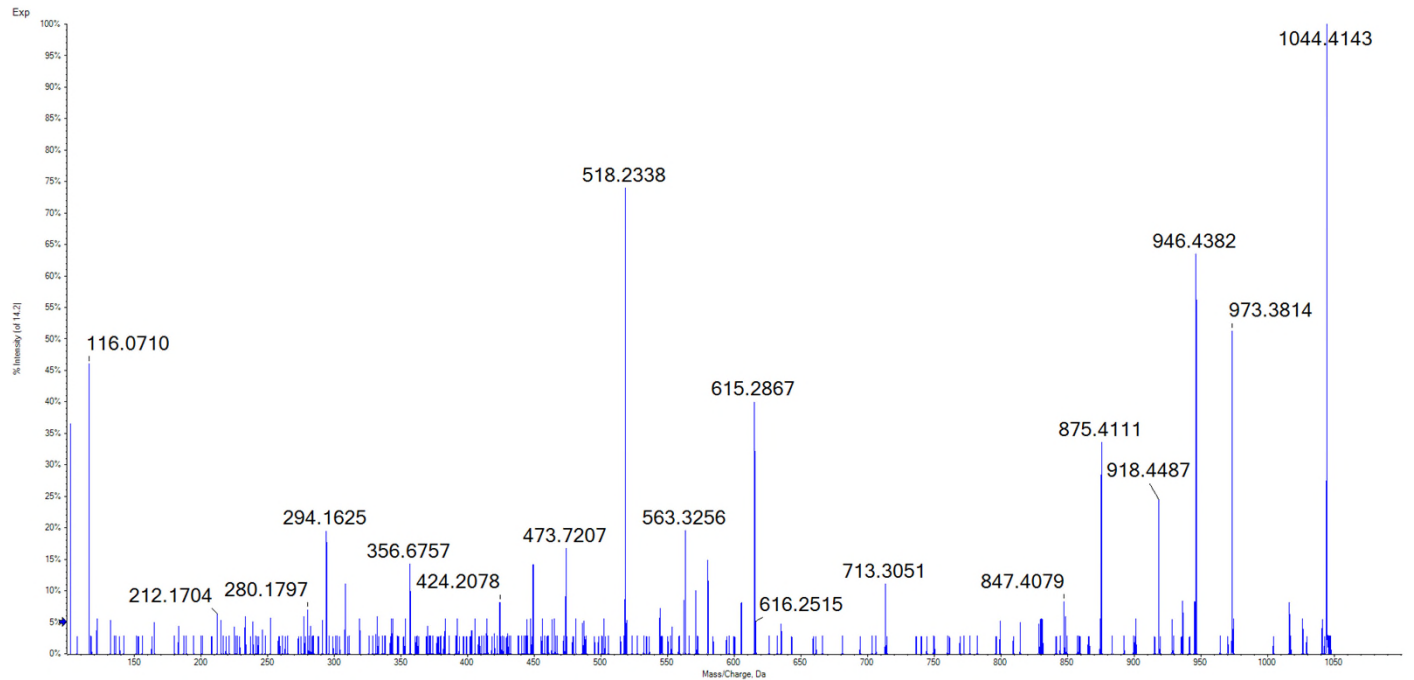
45

REY(pS)PPYAP

Synthetic
Peptide



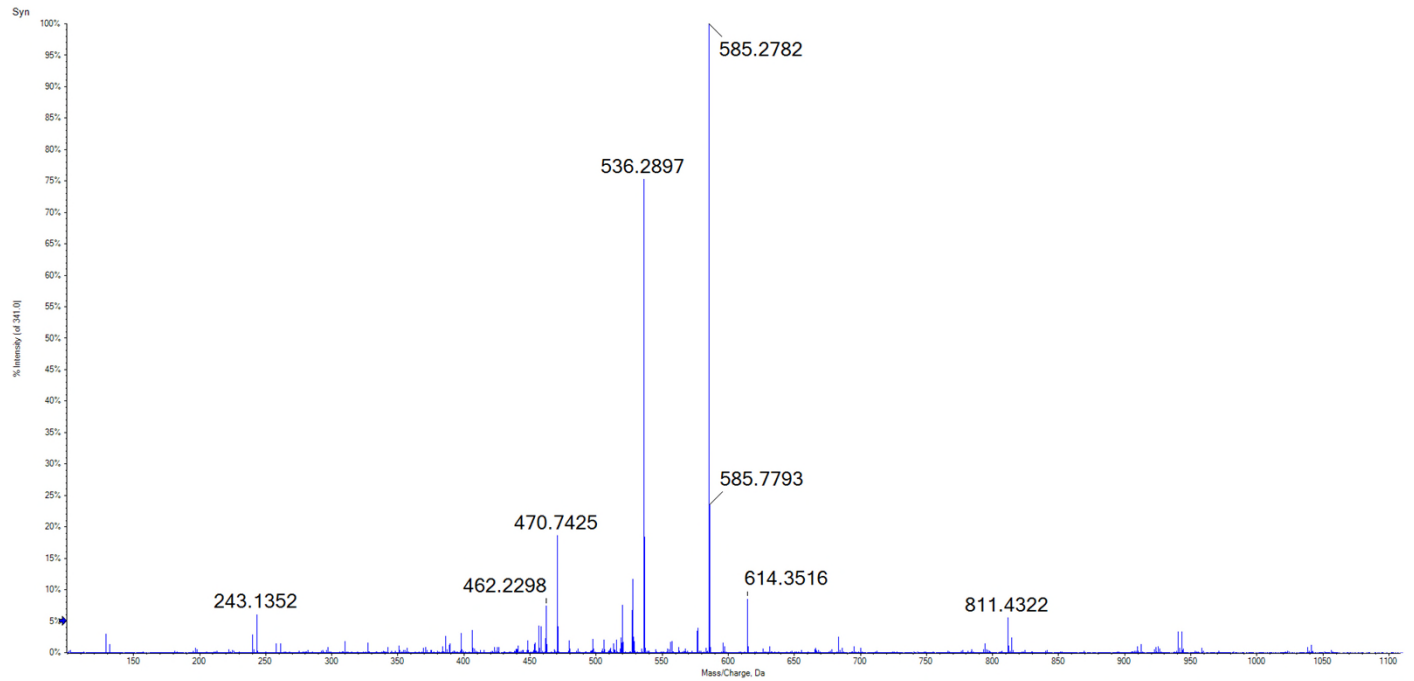
Candidate
Spectrum



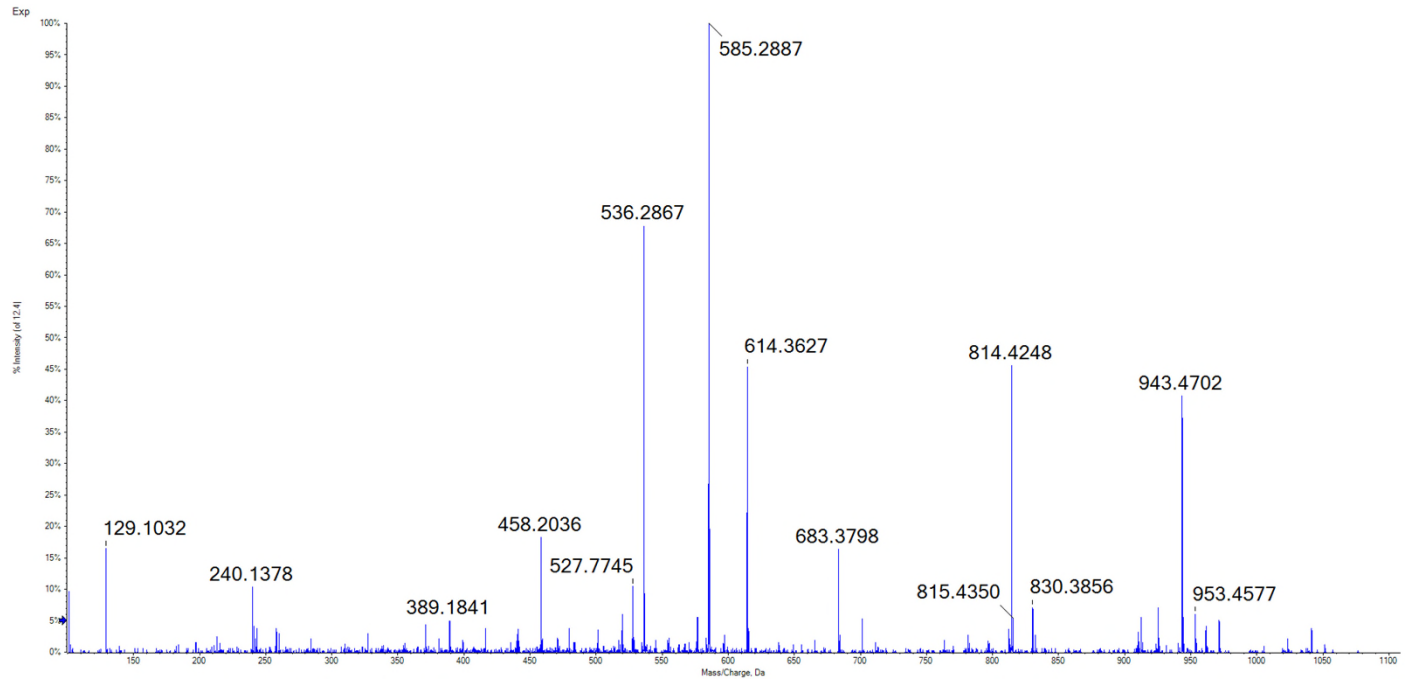
46

KEKEV(pS)QEL

Synthetic
Peptide



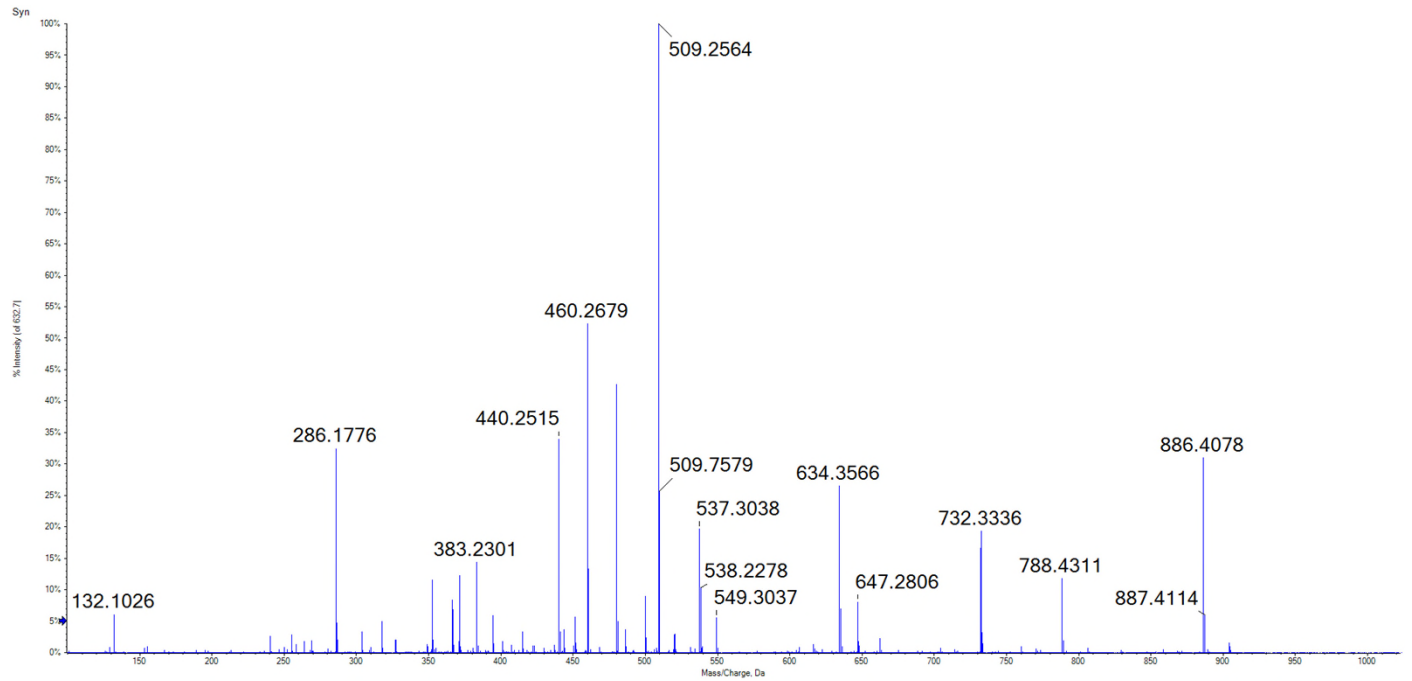
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Spectrum



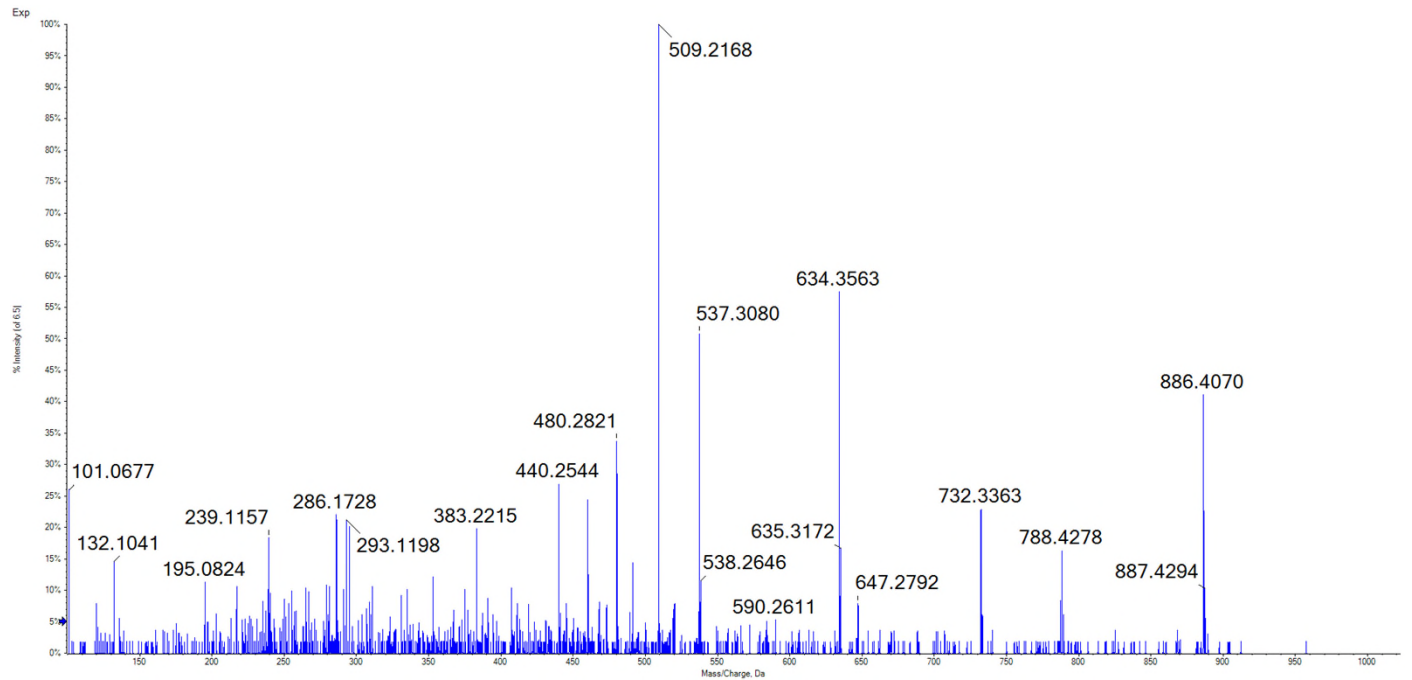
47

KEL(pS)PPPGL

Synthetic
Peptide



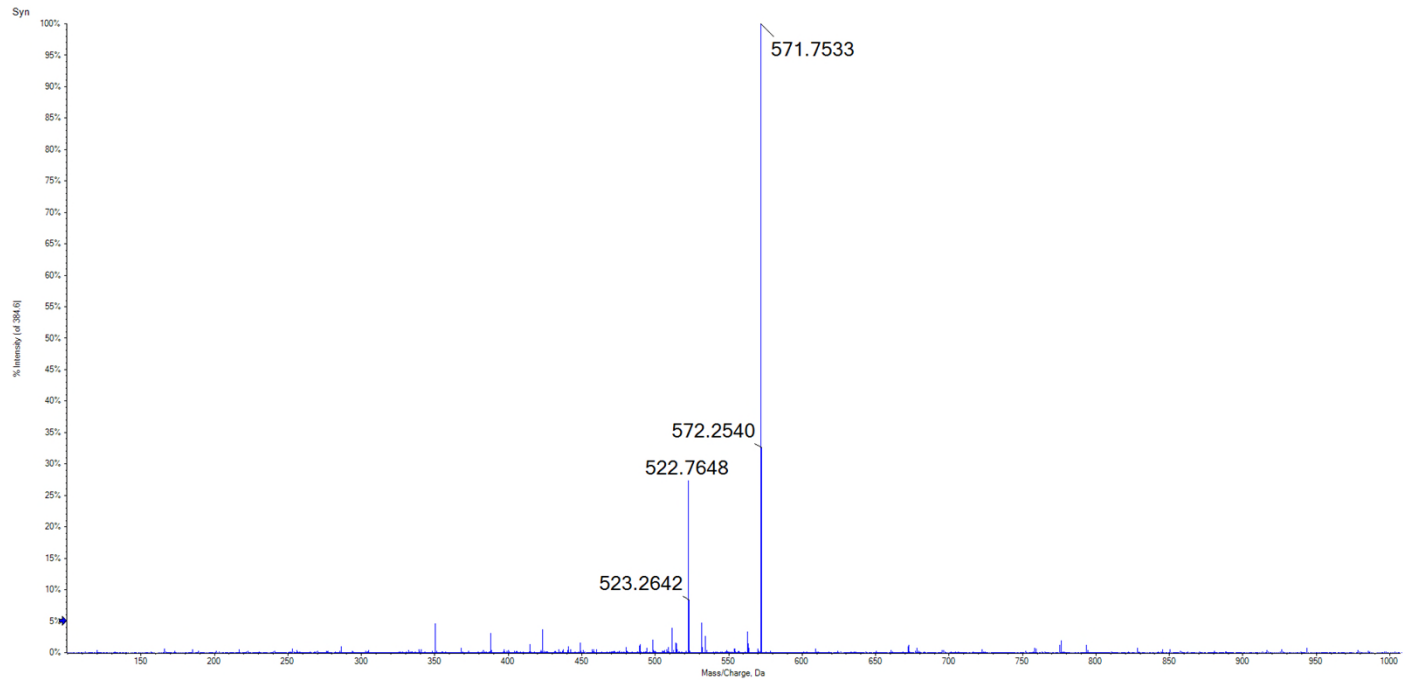
Candidate
Spectrum



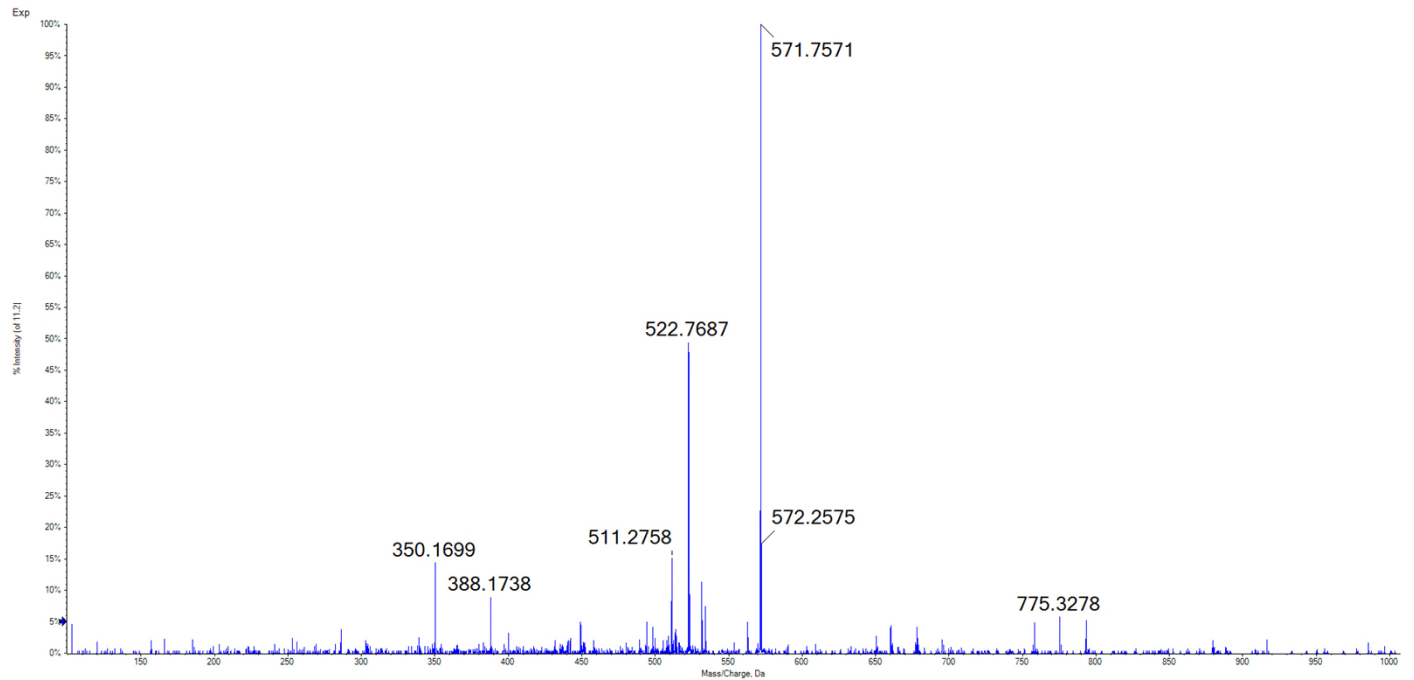
48

RER(pS)PSPSF

Synthetic
Peptide



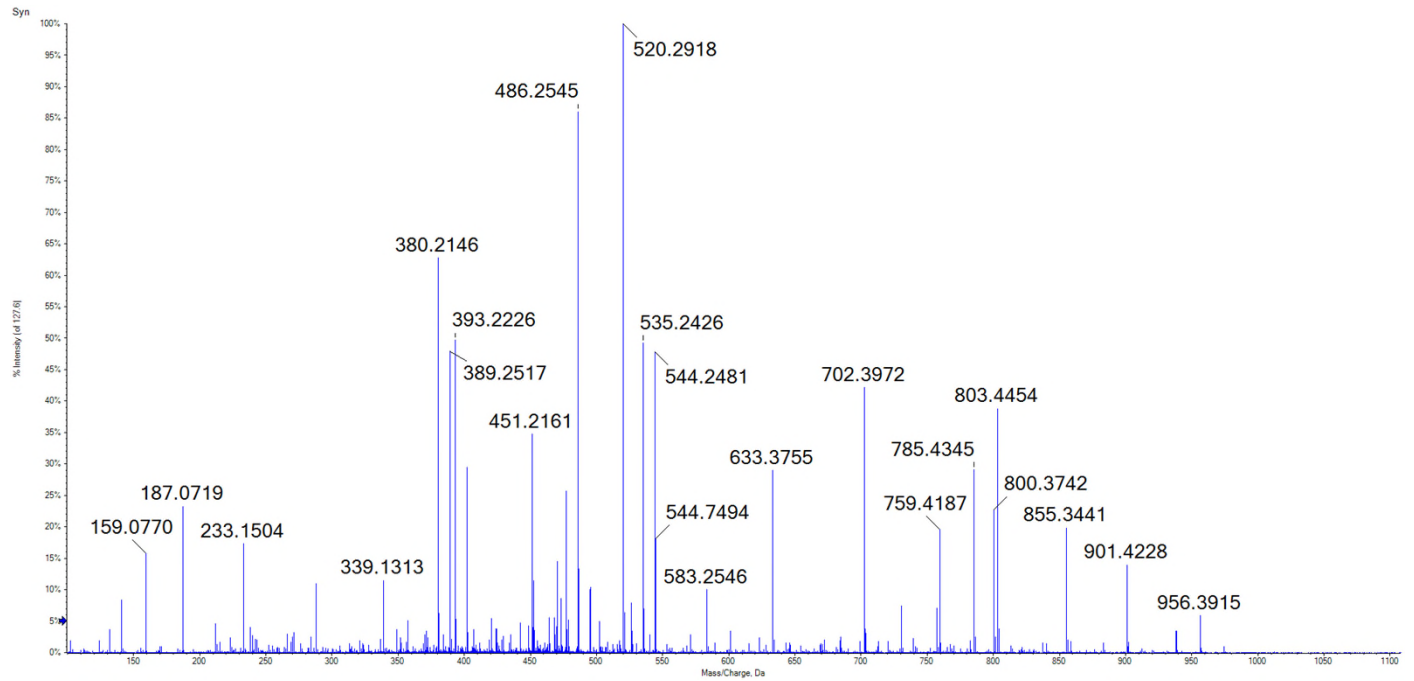
Candidate
Spectrum



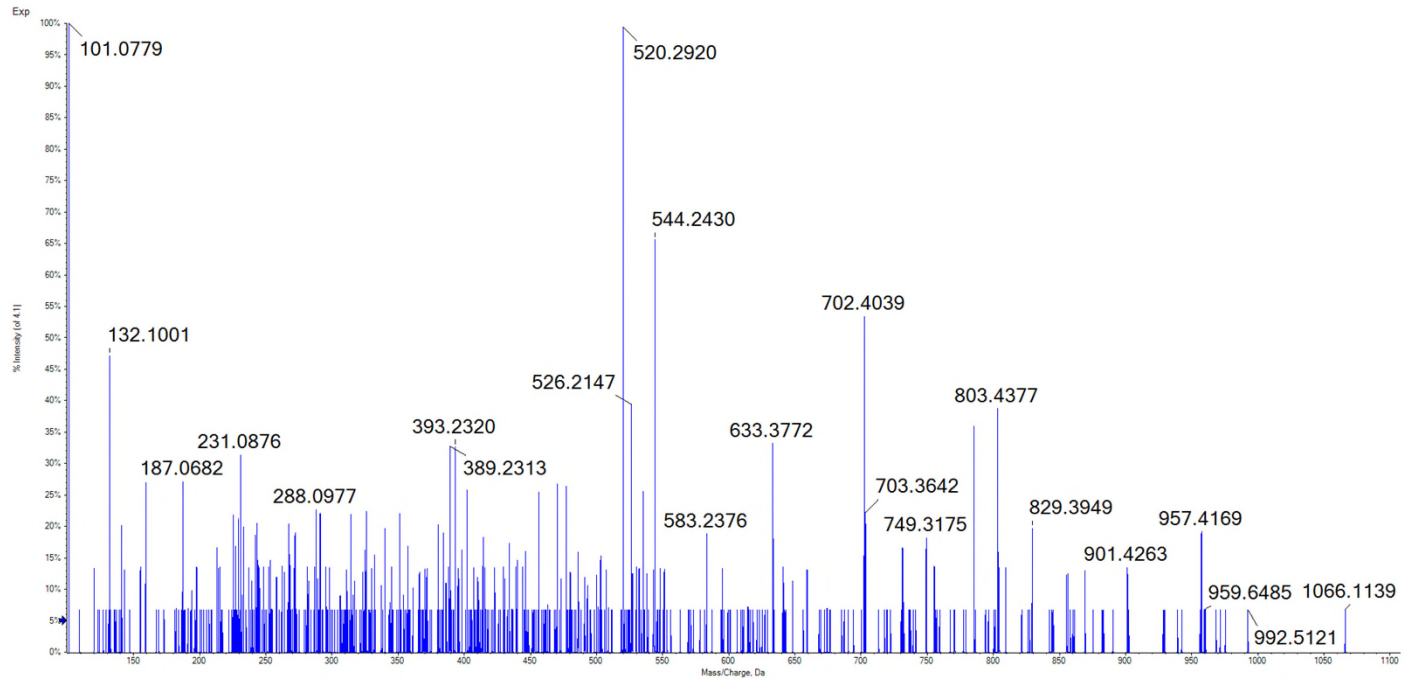
49

GET(pS)LMRTL

Synthetic
Peptide



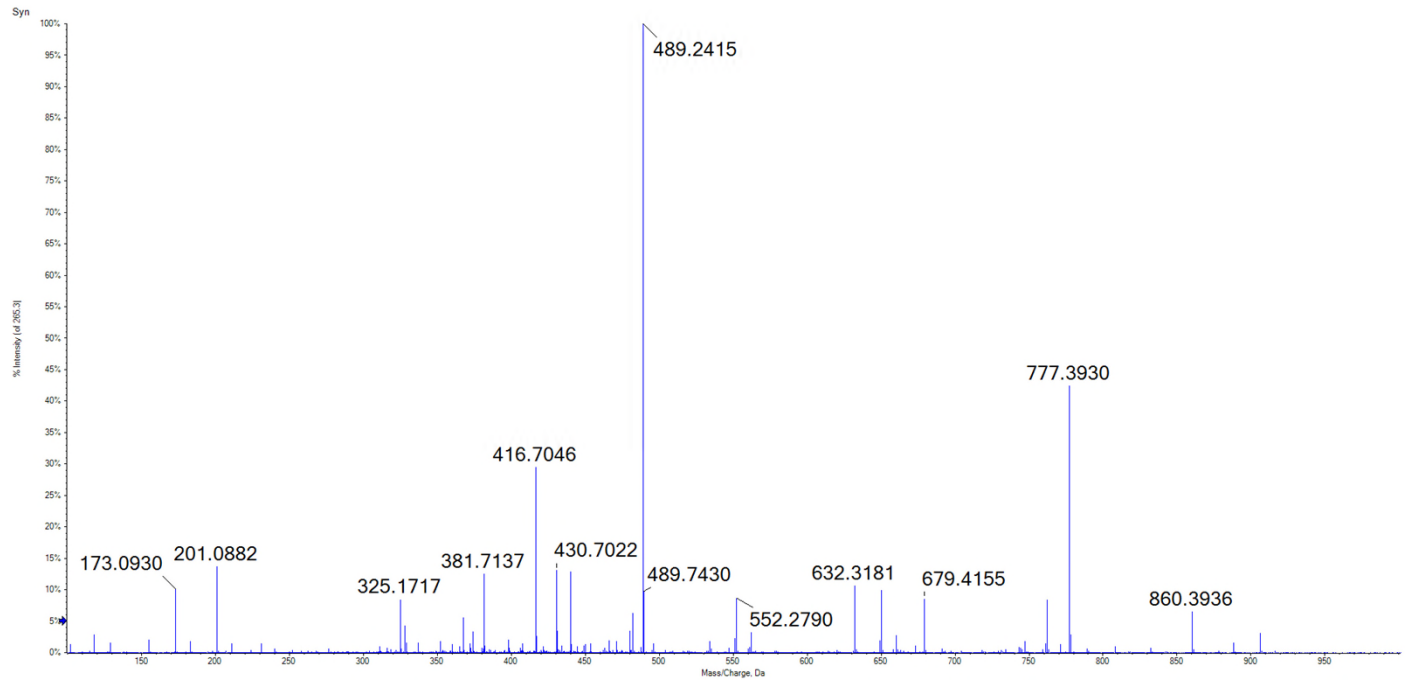
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Spectrum



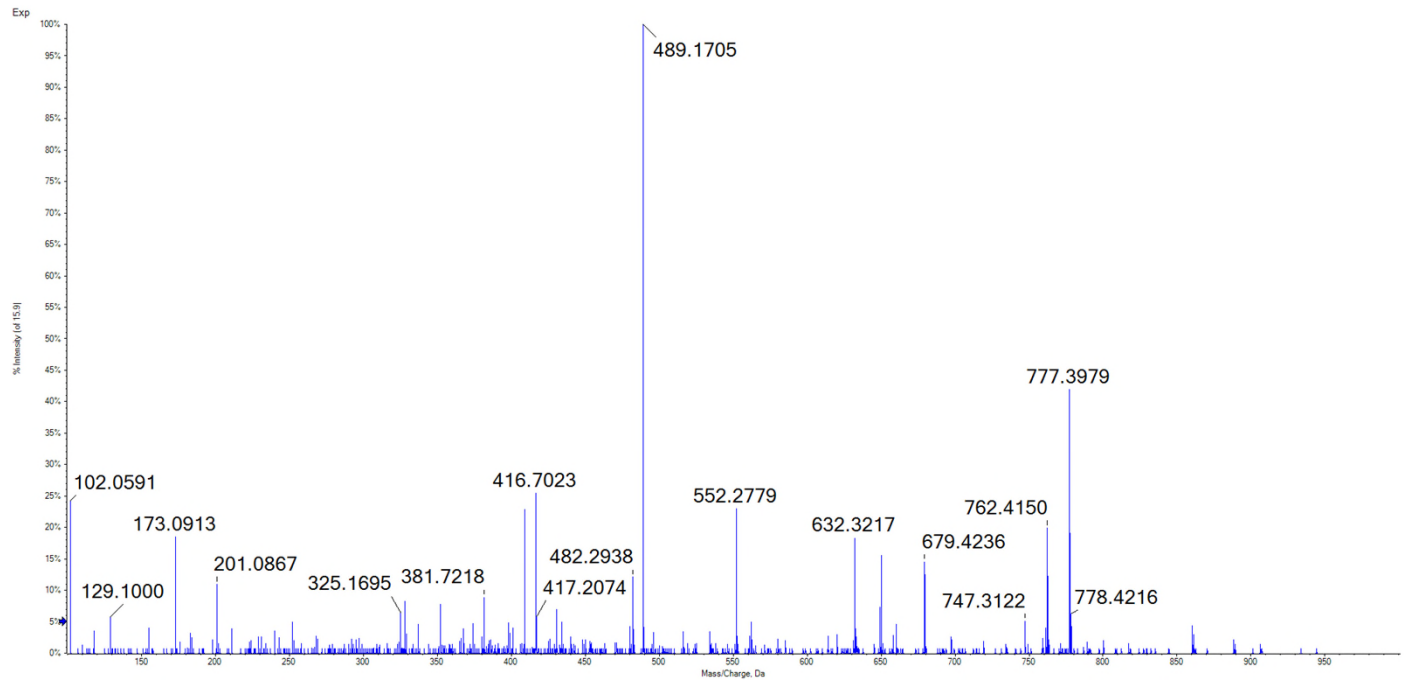
50

AEK(pS)PGPIV

Synthetic
Peptide



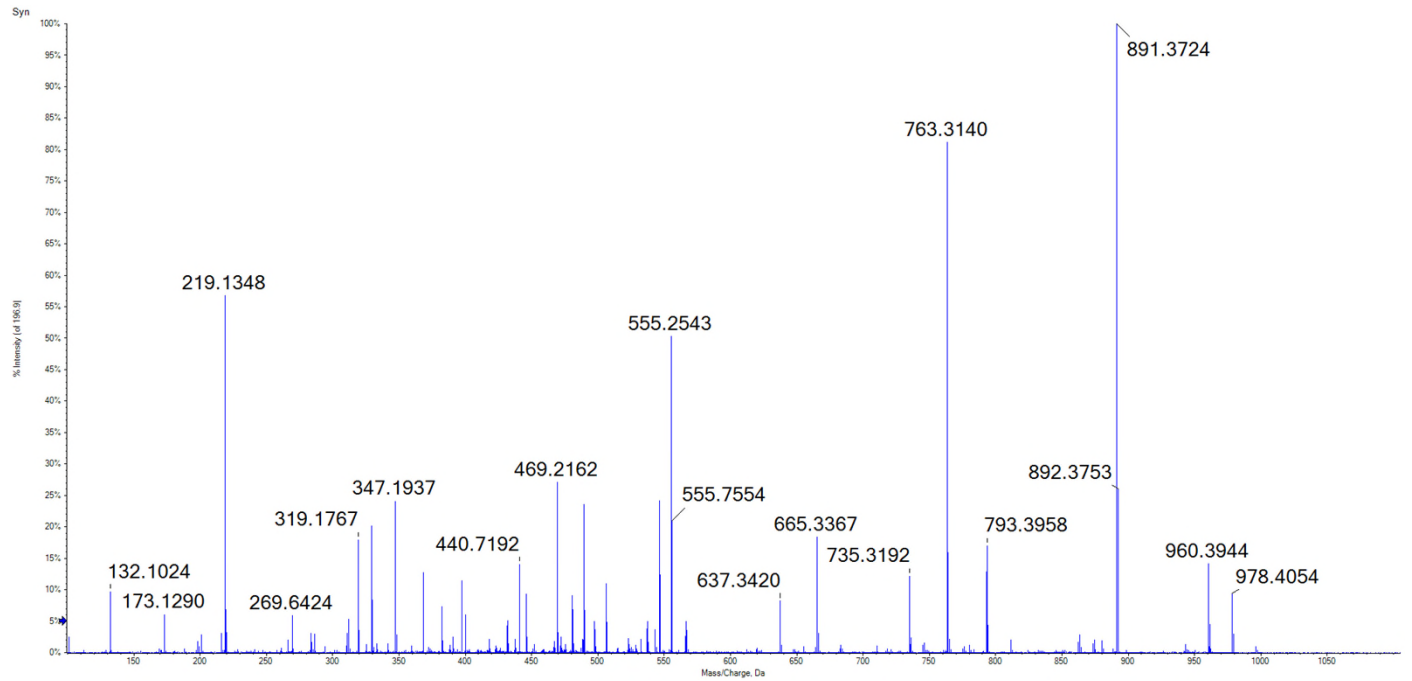
Candidate
Spectrum



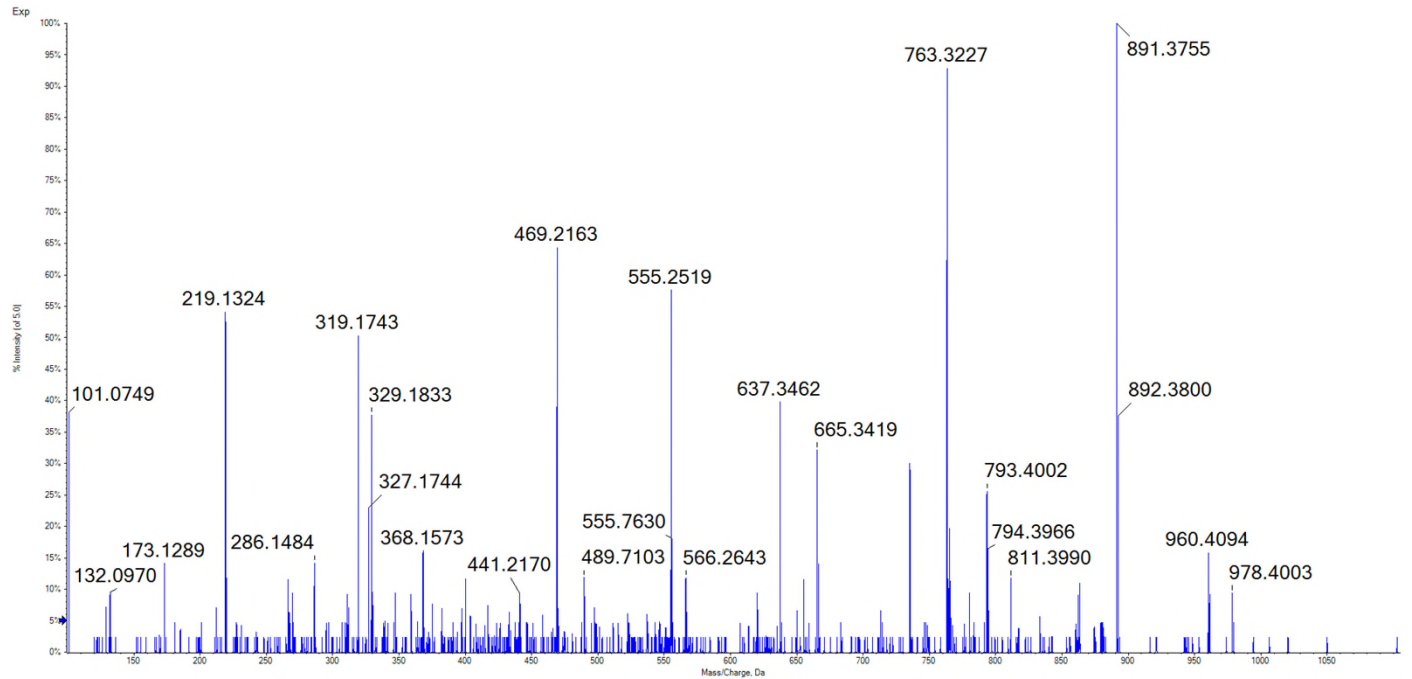
51

REN(pS)PVQSI

Synthetic
Peptide

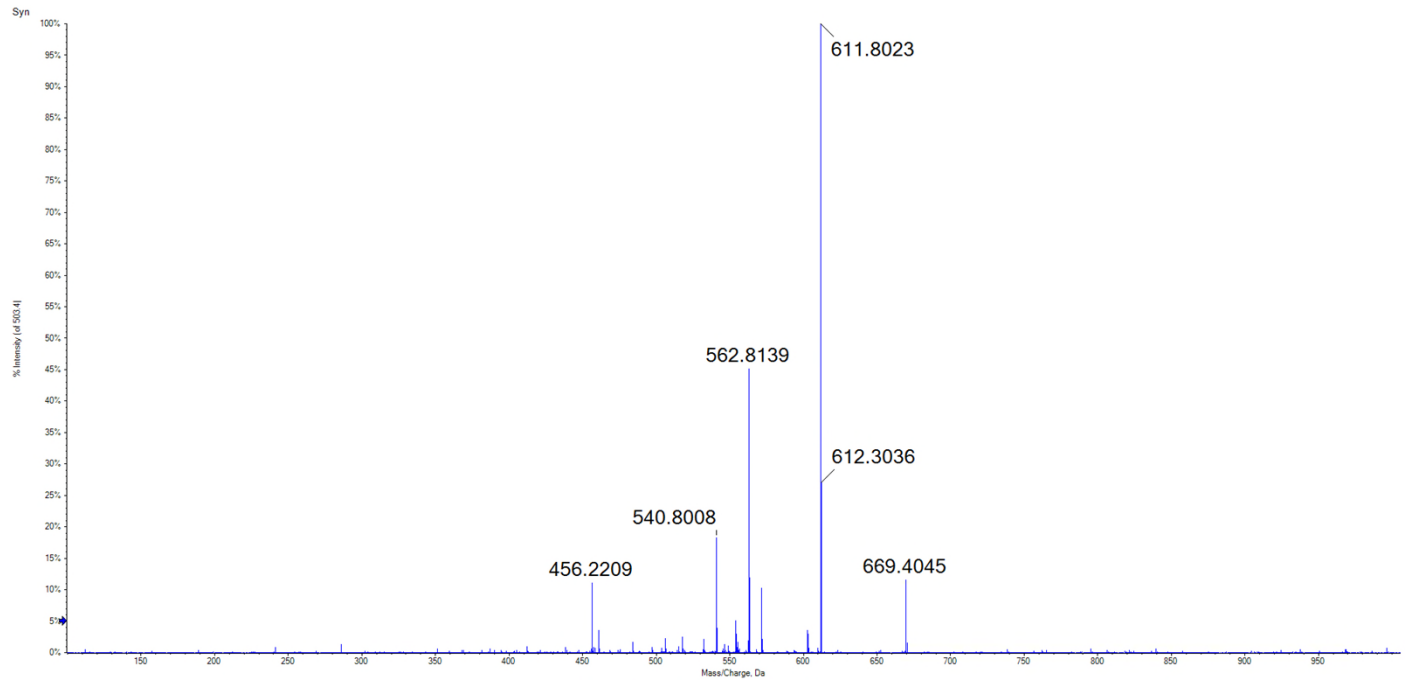


Candidate
Spectrum

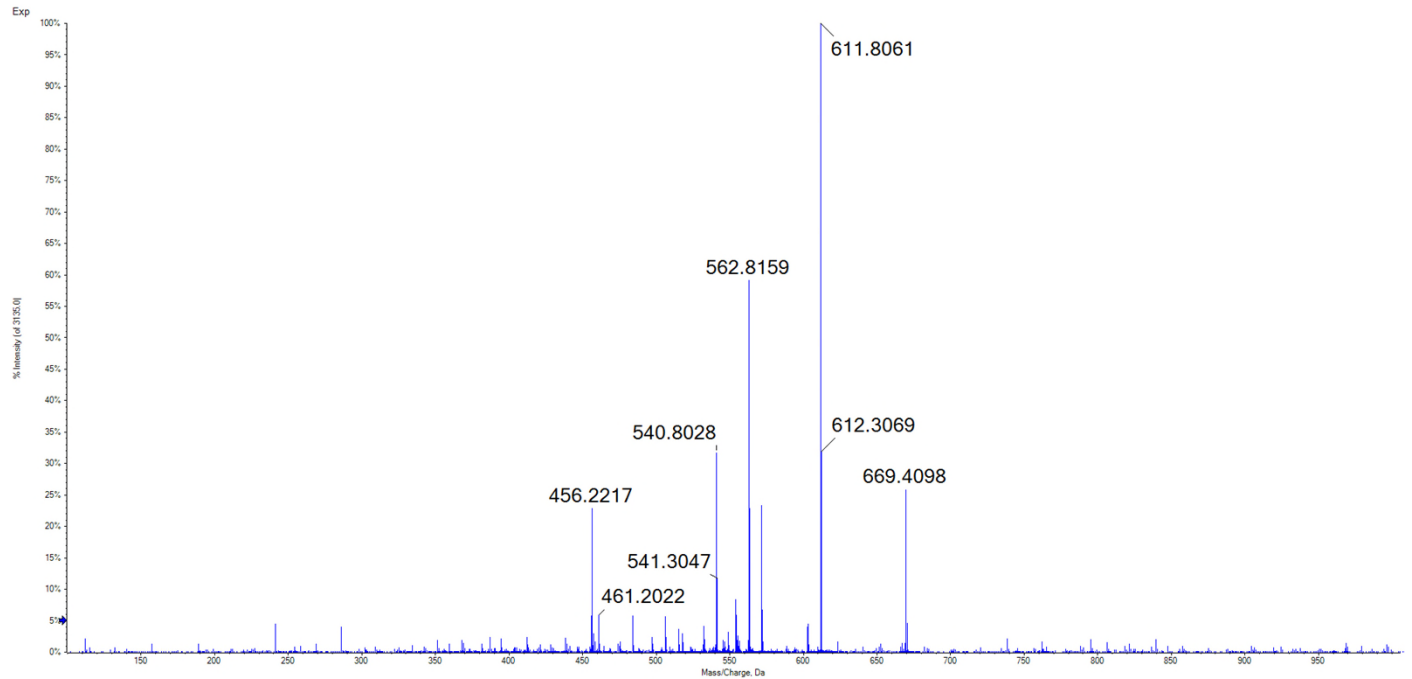


52 RET(pS)PNRIGL

Synthetic
Peptide



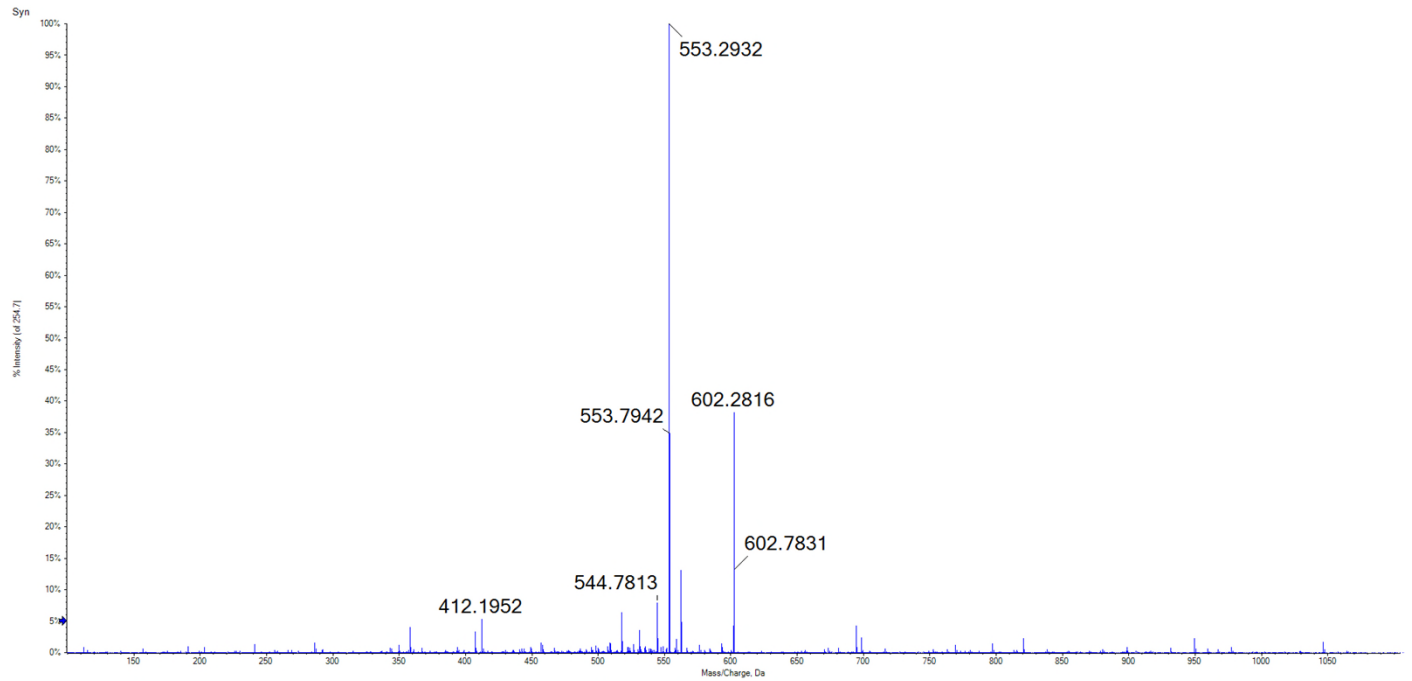
Candidate
Spectrum



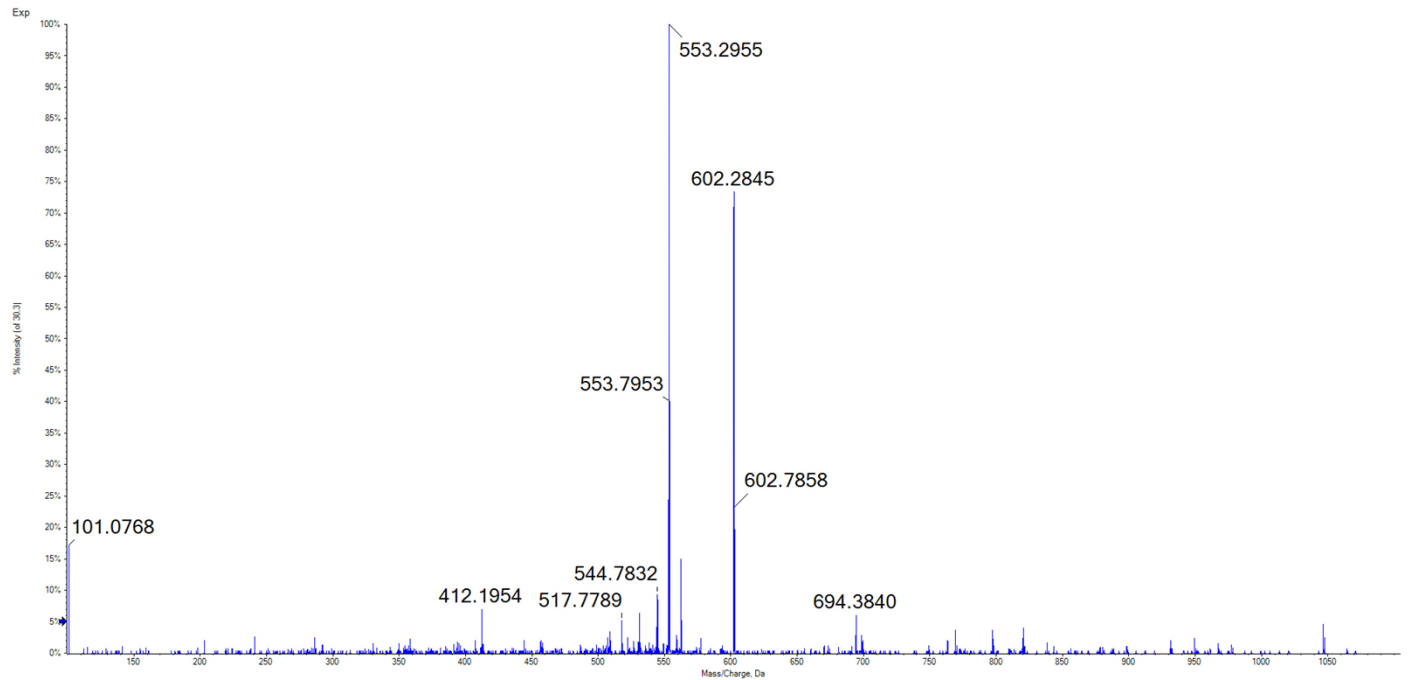
53

REG(pS)FRVTTA

Synthetic
Peptide



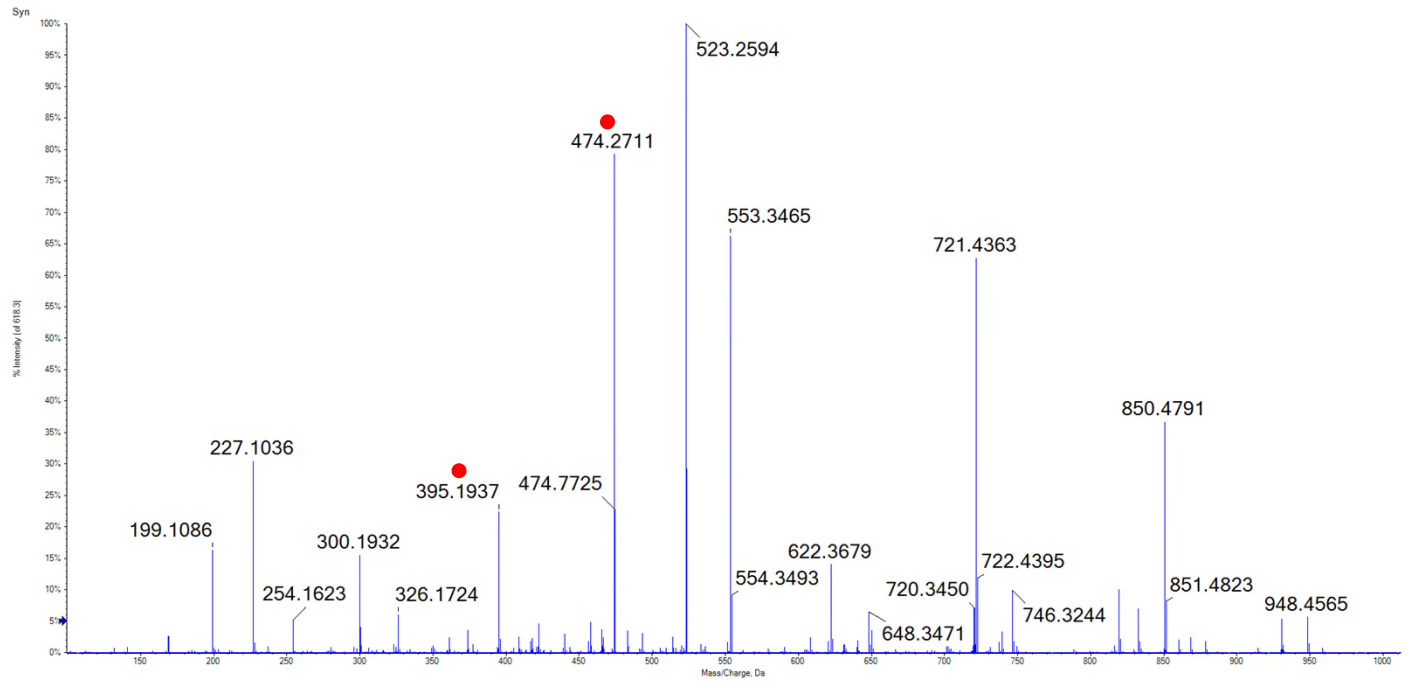
Candidate
Spectrum



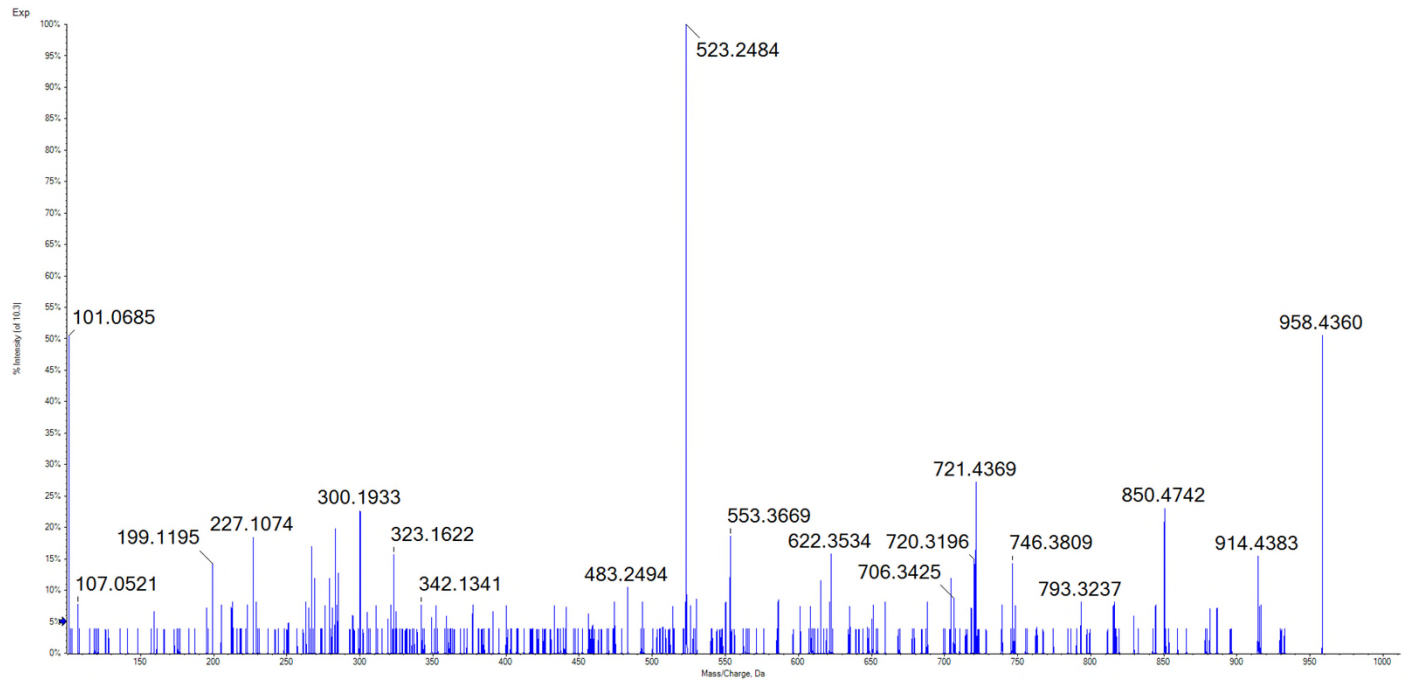
54

PEV(pS)PRPAL

Synthetic
Peptide



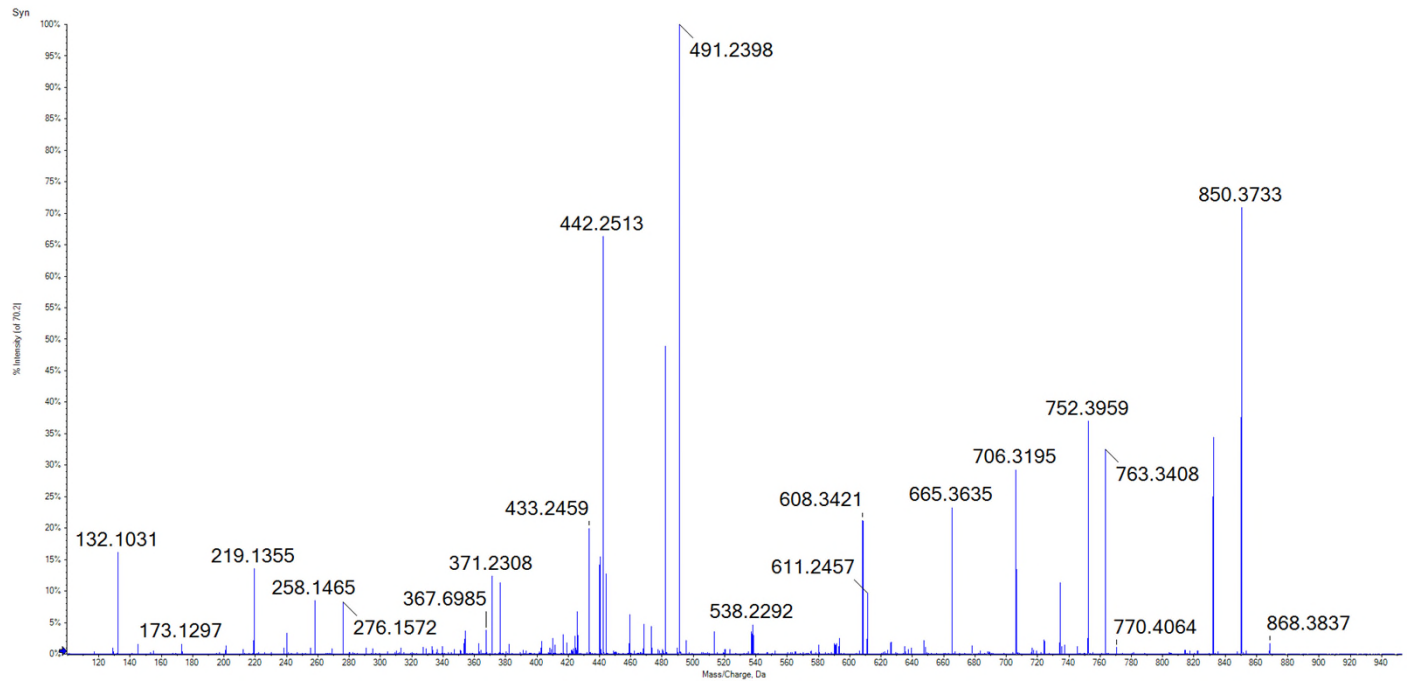
Candidate
Spectrum



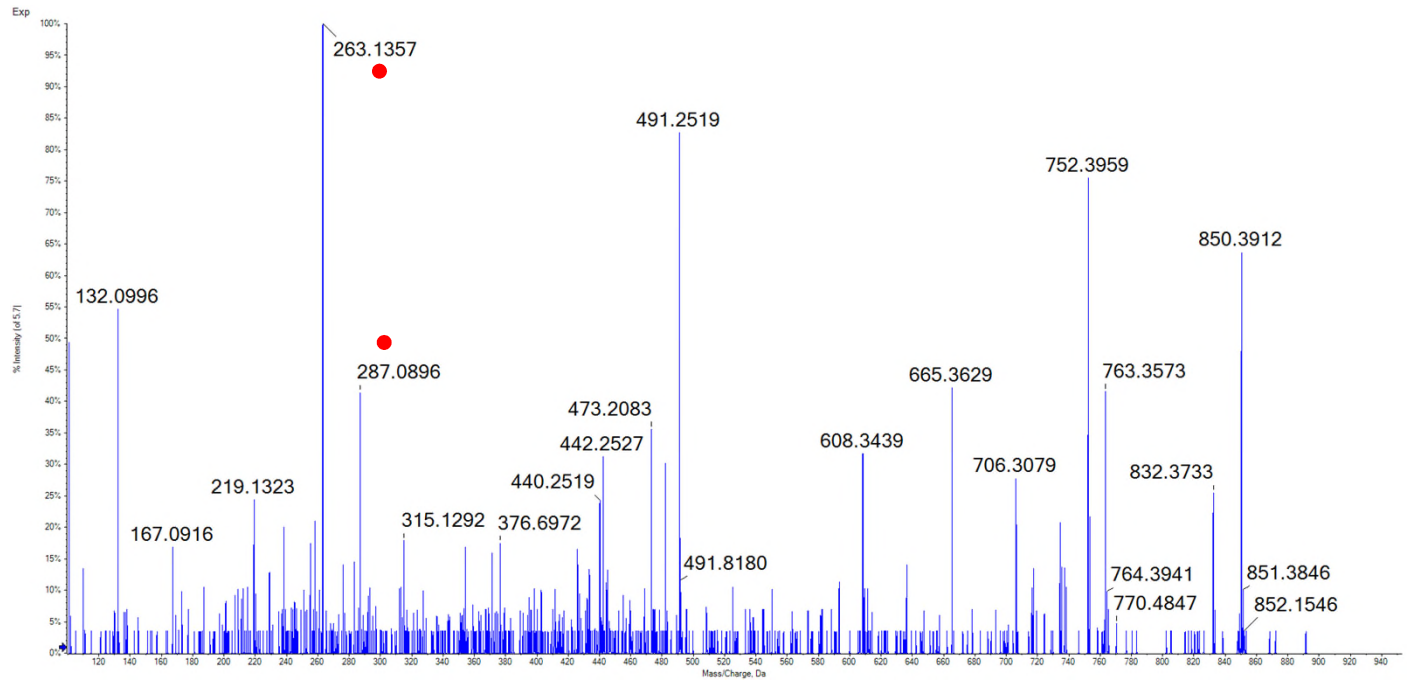
55

KEL(pS)PAGSI

Synthetic Peptide

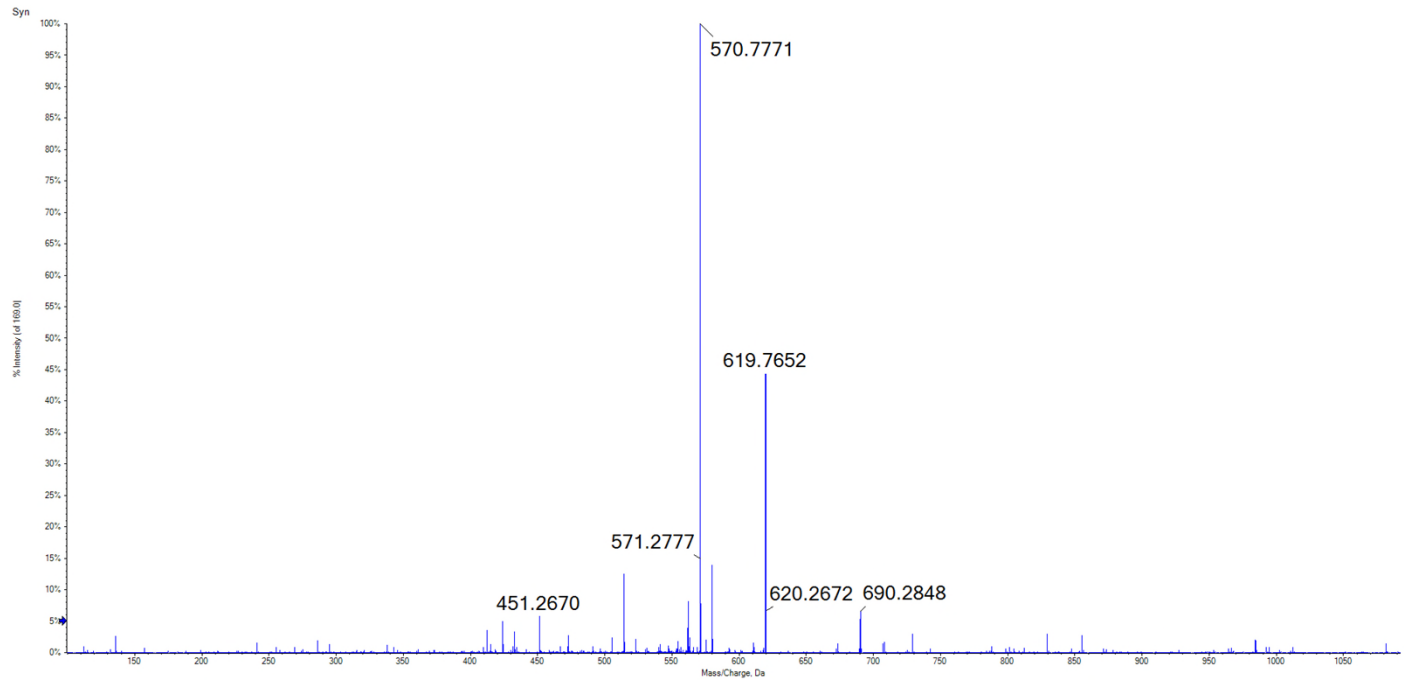


Candidate Spectrum

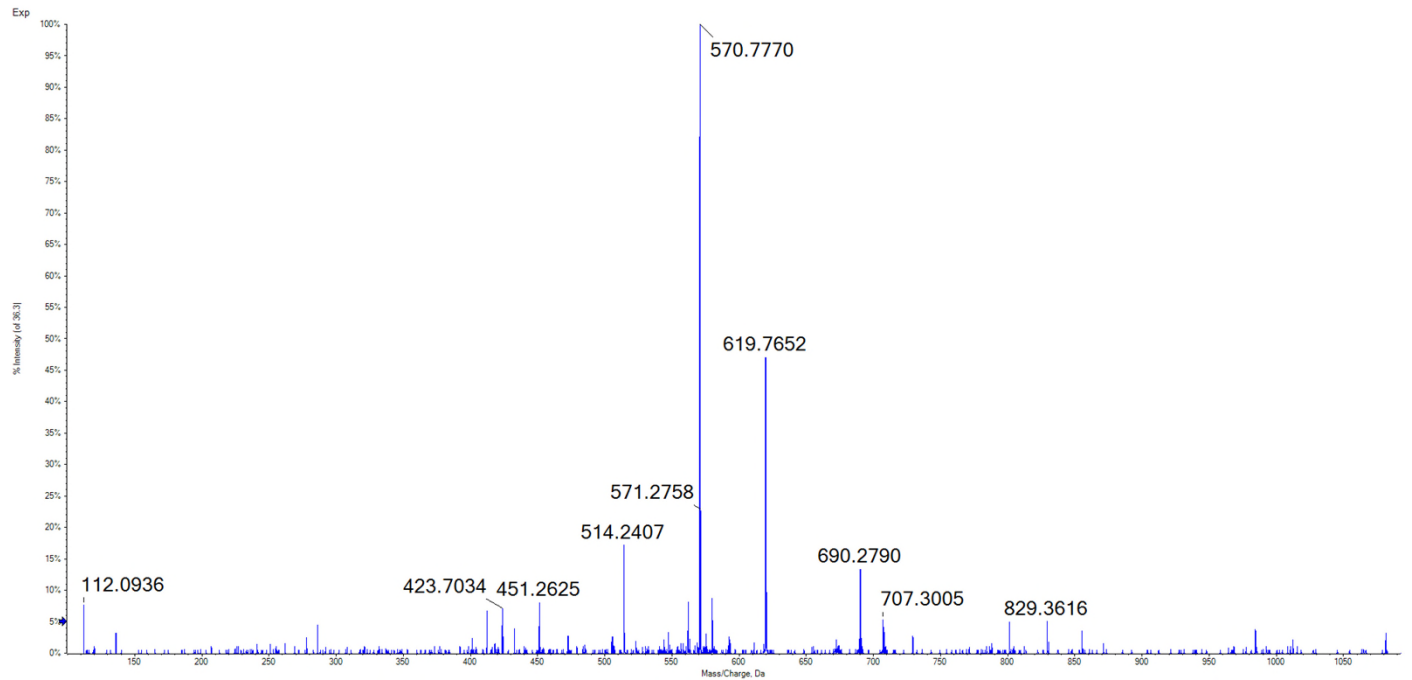


56 REG(pS)YDRYL

Synthetic
Peptide



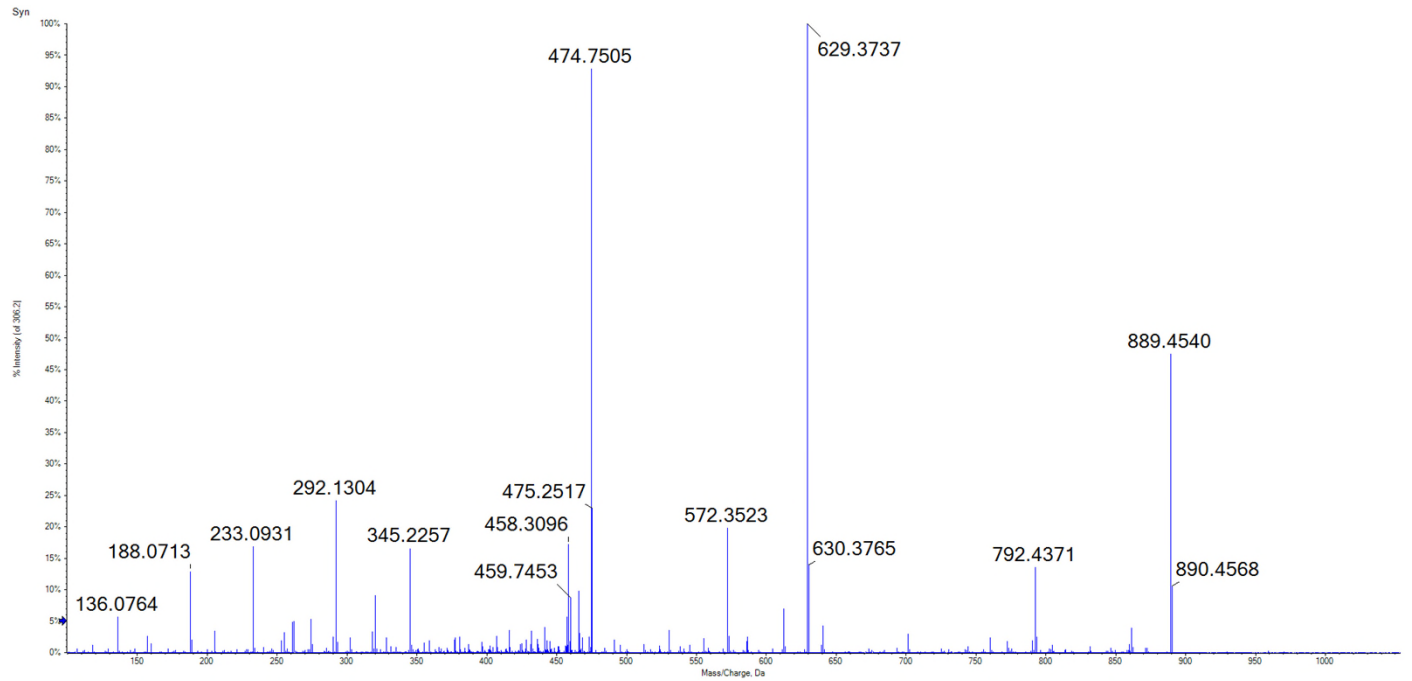
Candidate
Spectrum



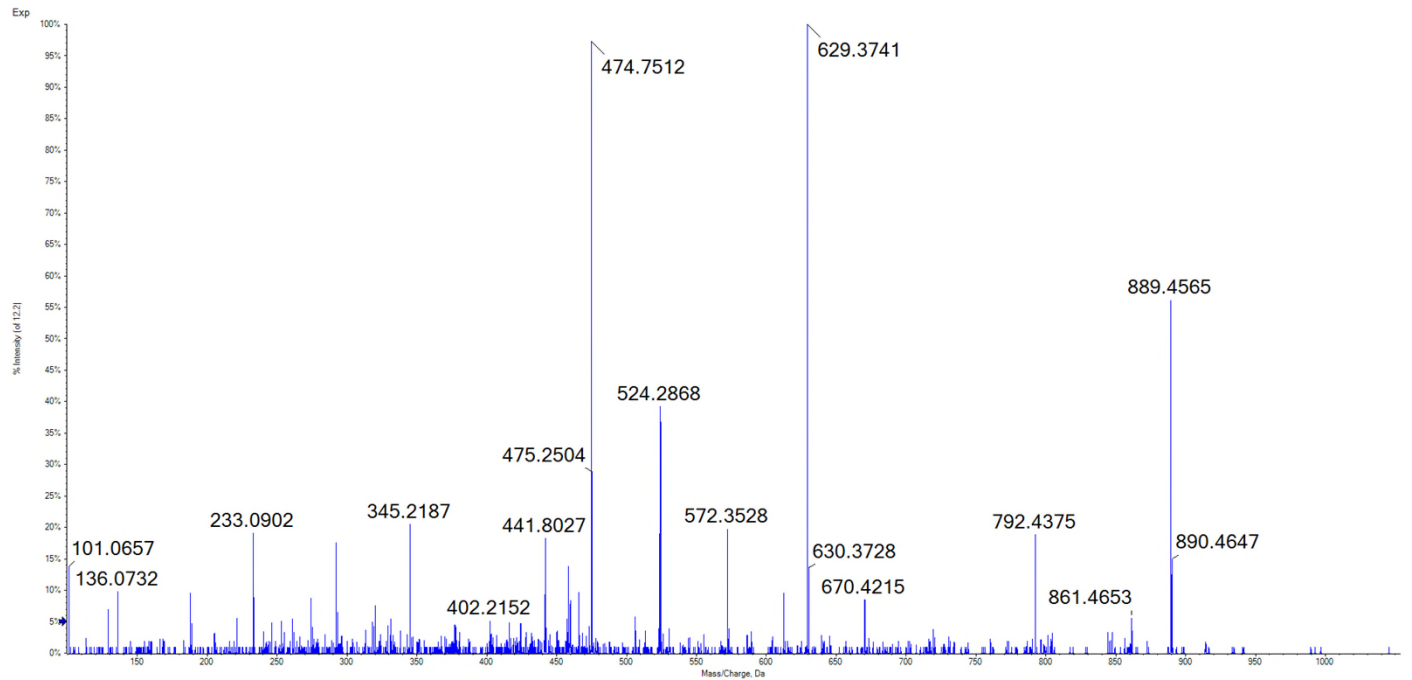
57

S(pS)YGNIRAV

Synthetic
Peptide

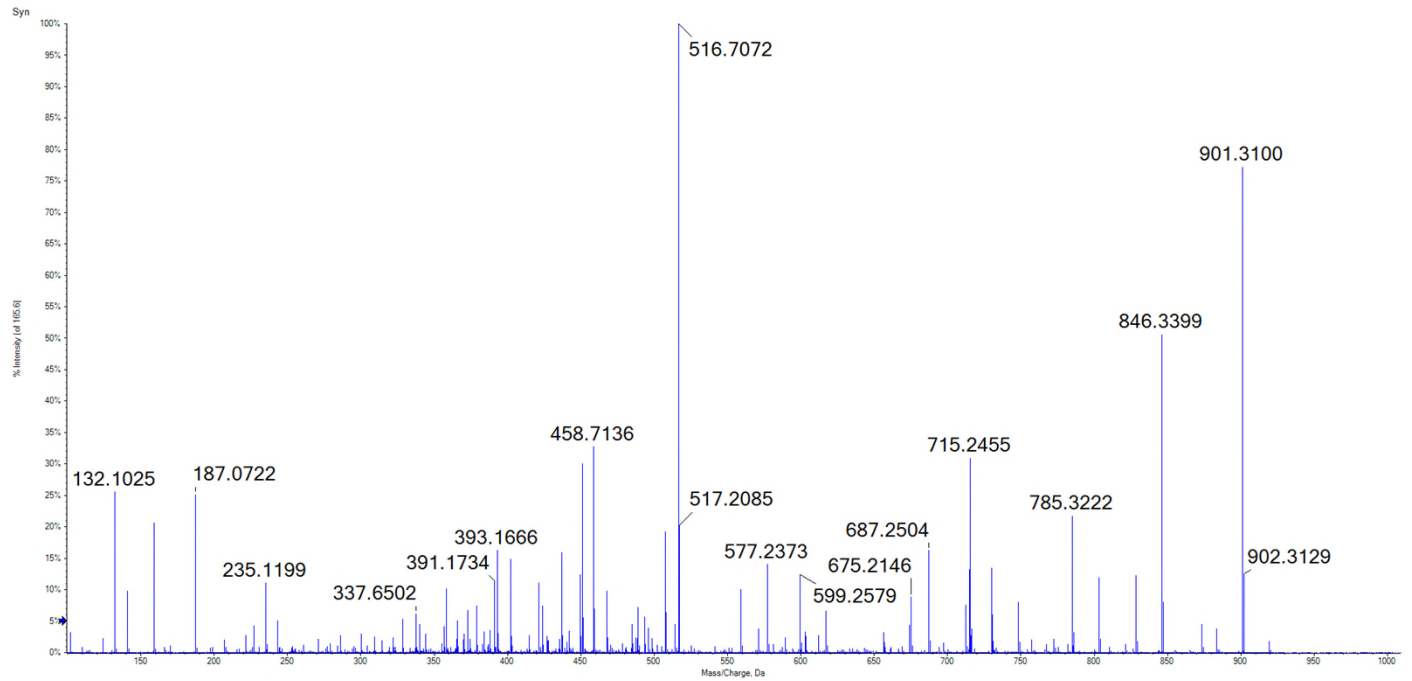


Candidate
Spectrum

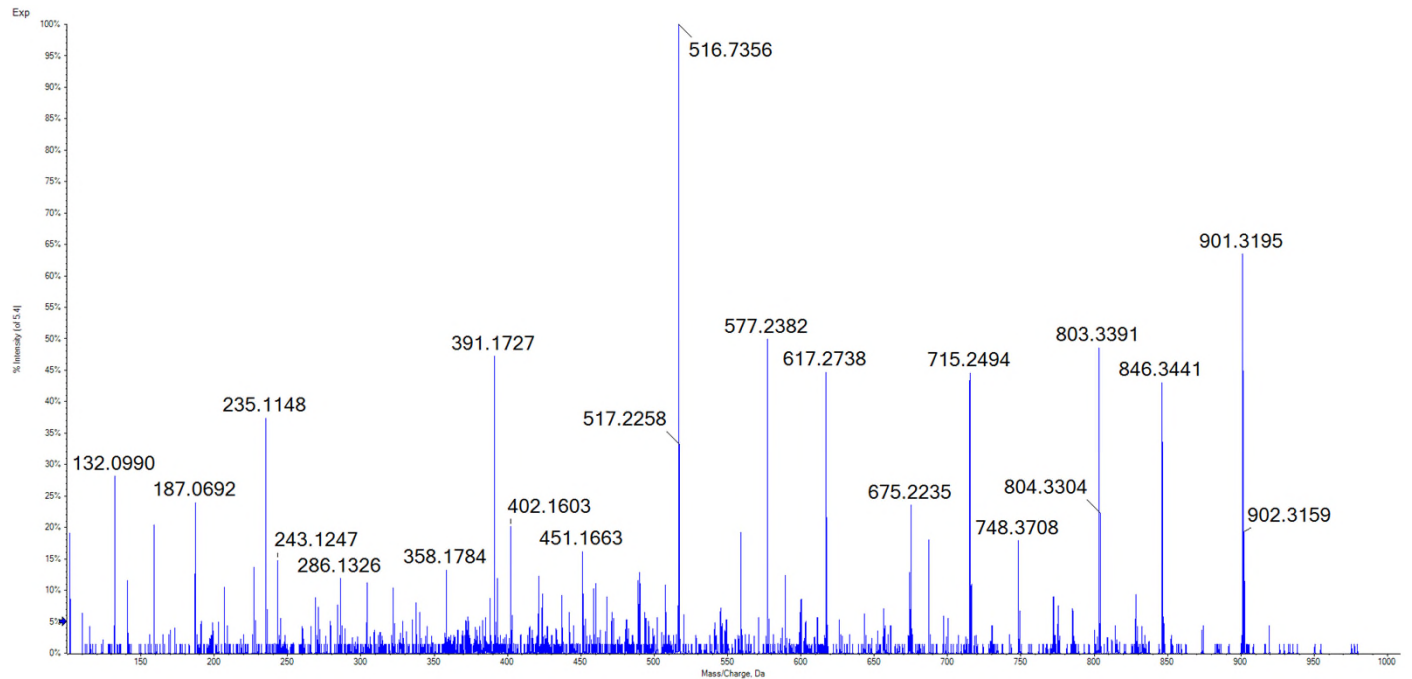


58 GEPHS(pS)PEL

Synthetic
Peptide



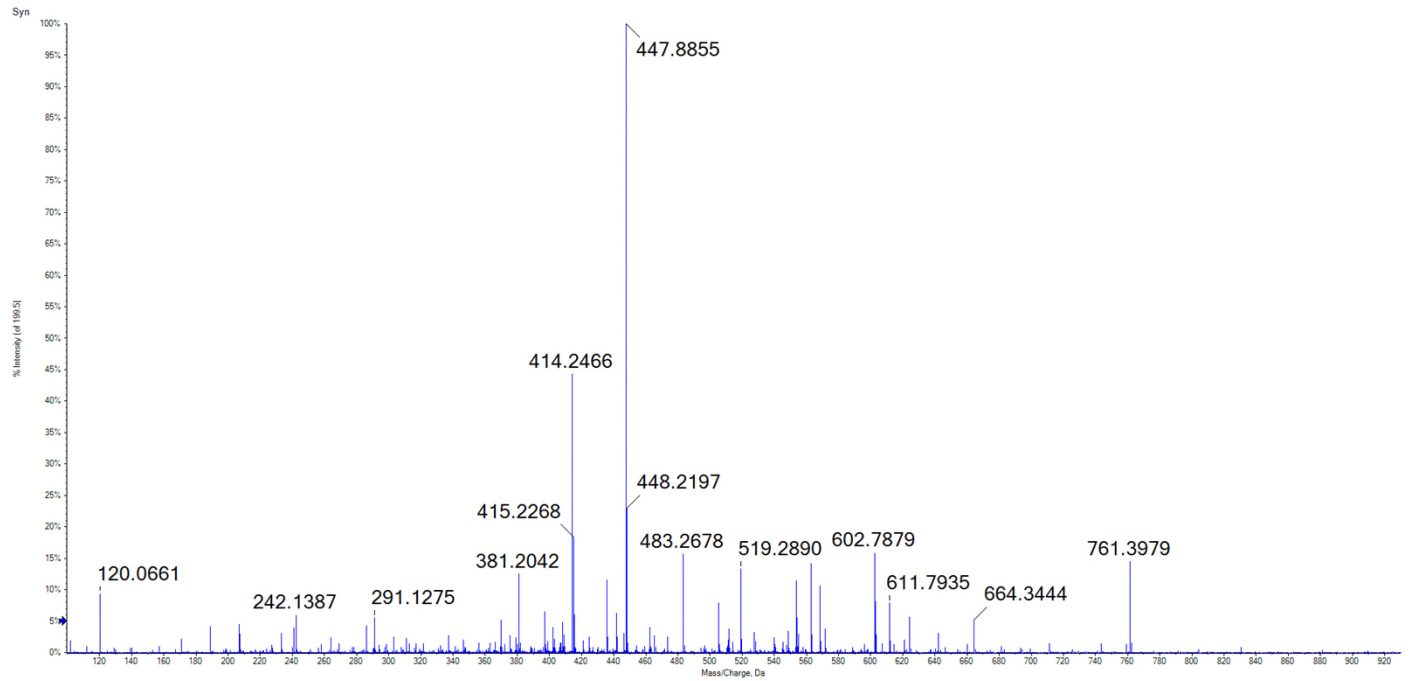
Candidate
Spectrum



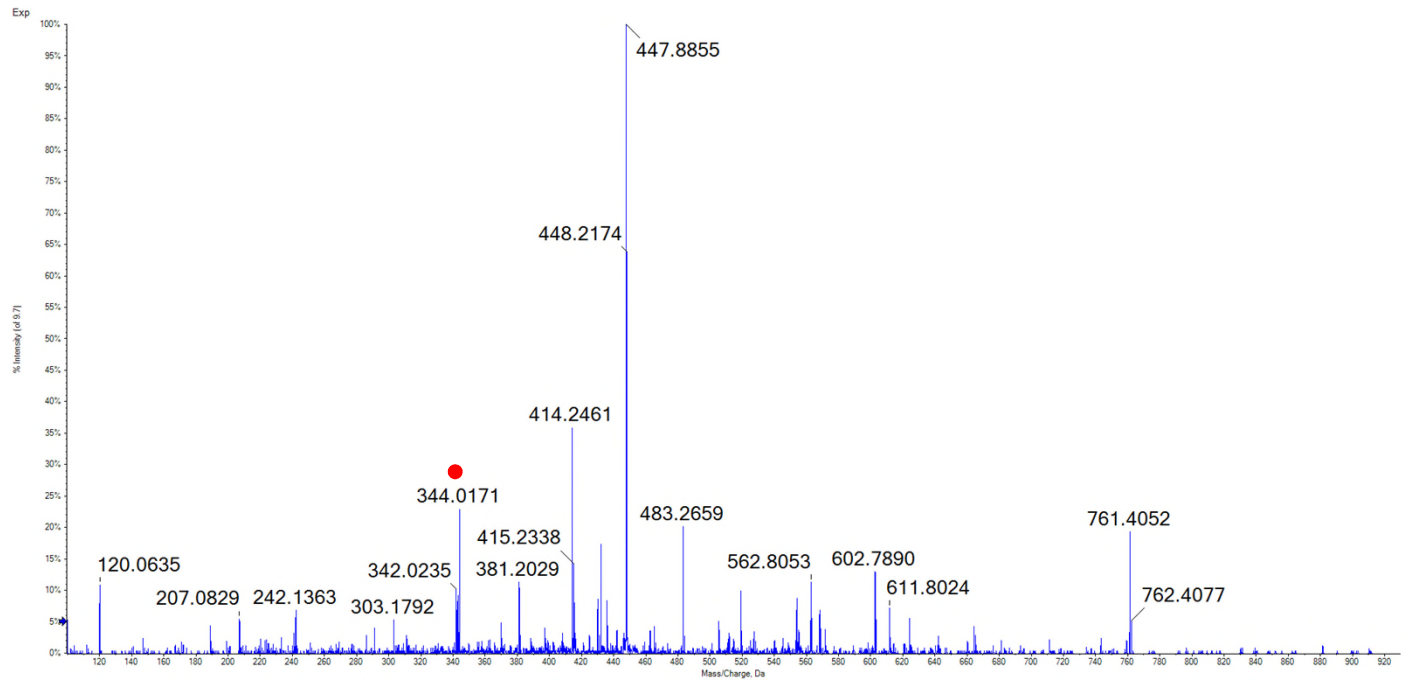
59

REK(pS)PGRMLST

Synthetic
Peptide

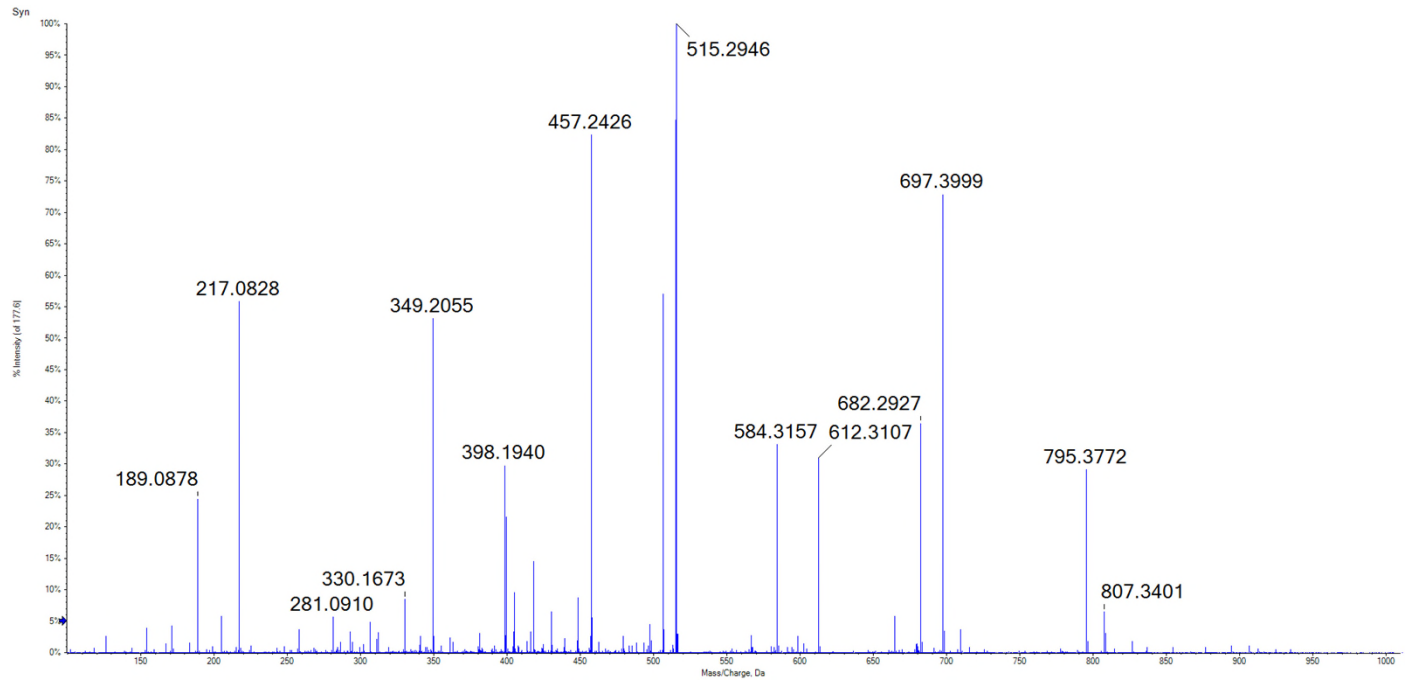


Candidate
Spectrum

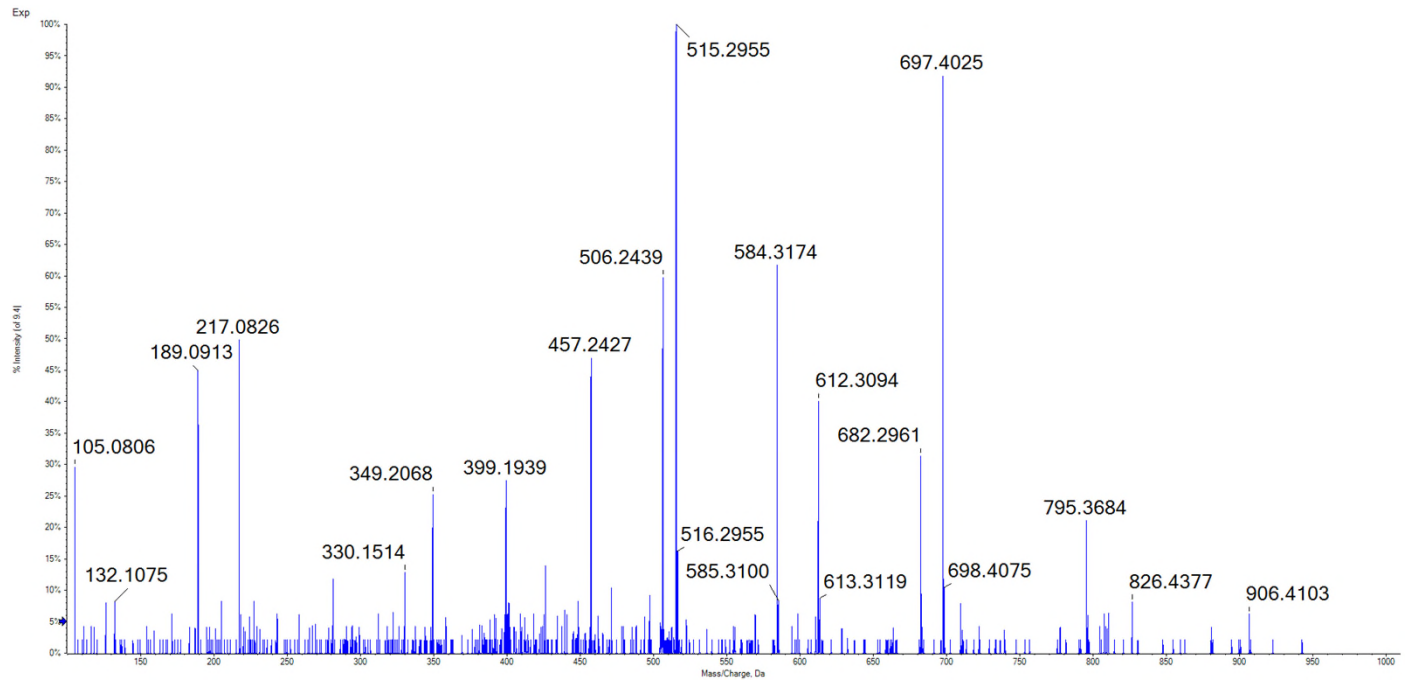


60 SEL(pS)PGRSV

Synthetic
Peptide

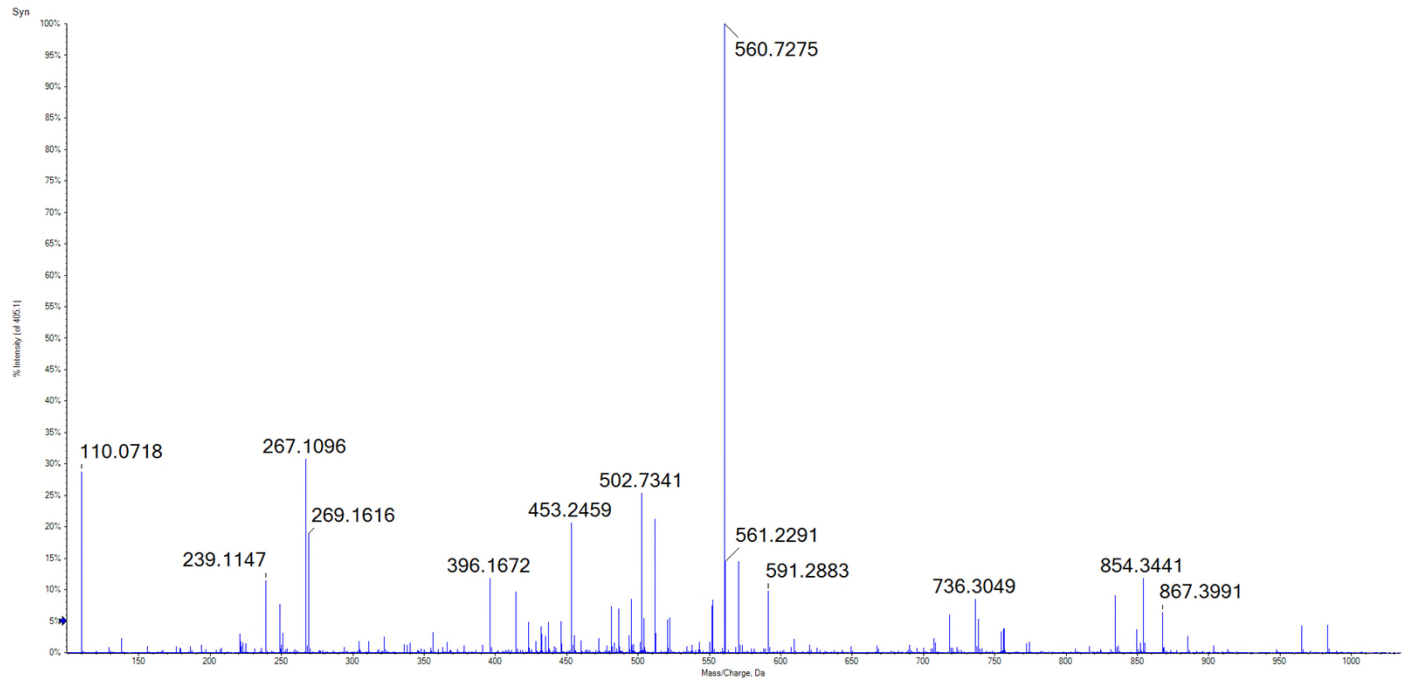


Candidate
Spectrum

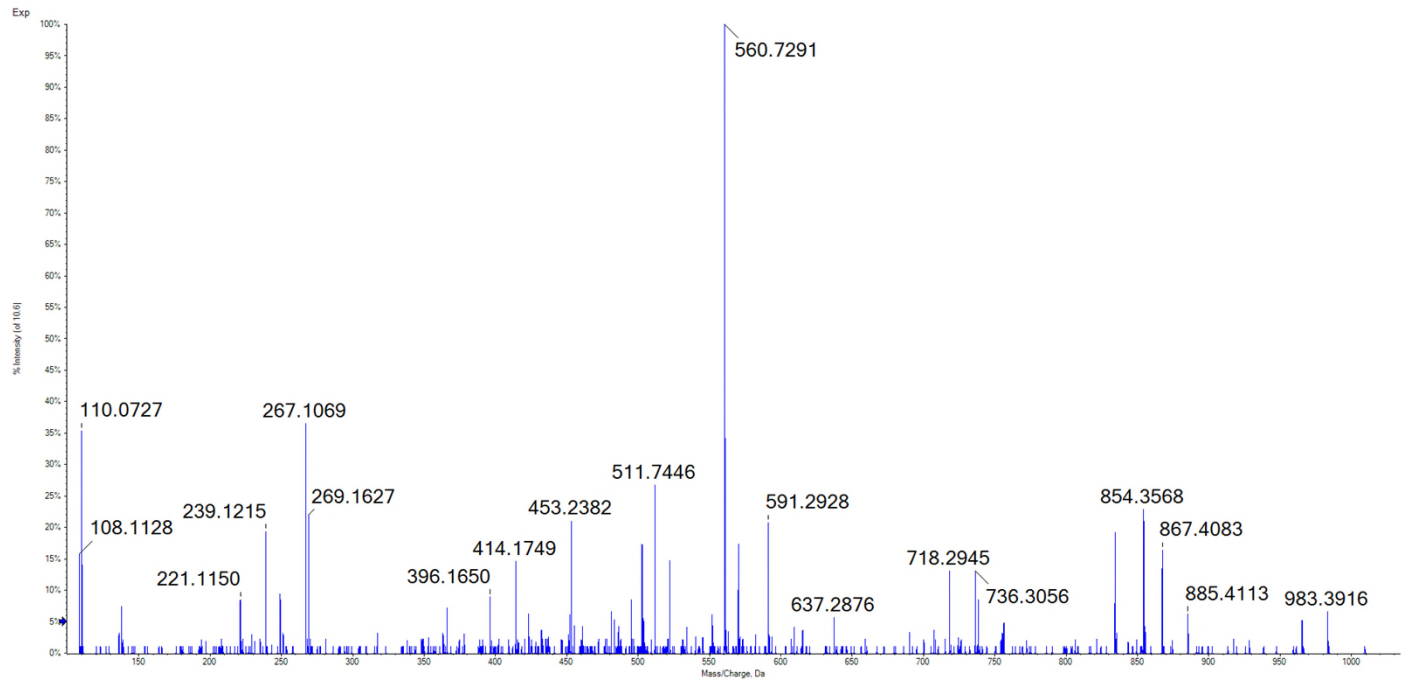


61 HEFS(pS)PSHL

Synthetic
Peptide



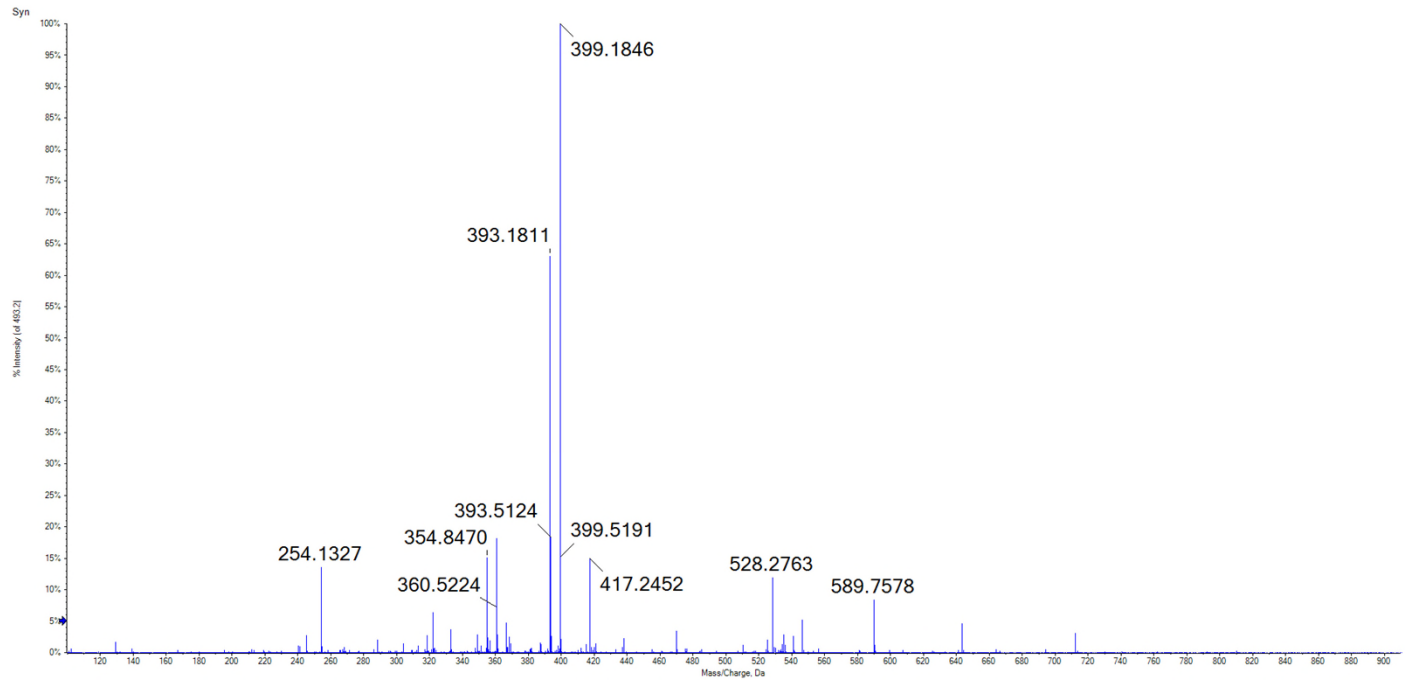
Candidate
Spectrum



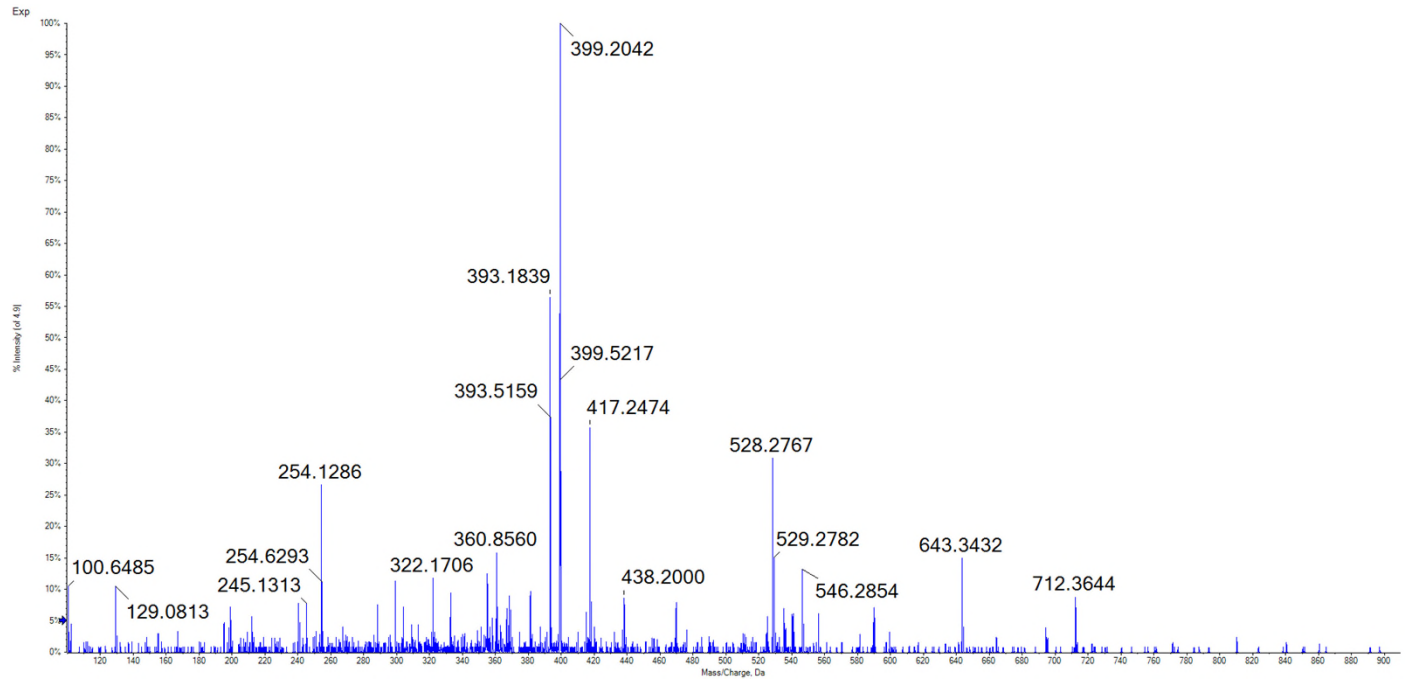
62

QEK(pS)PEERL

Synthetic
Peptide



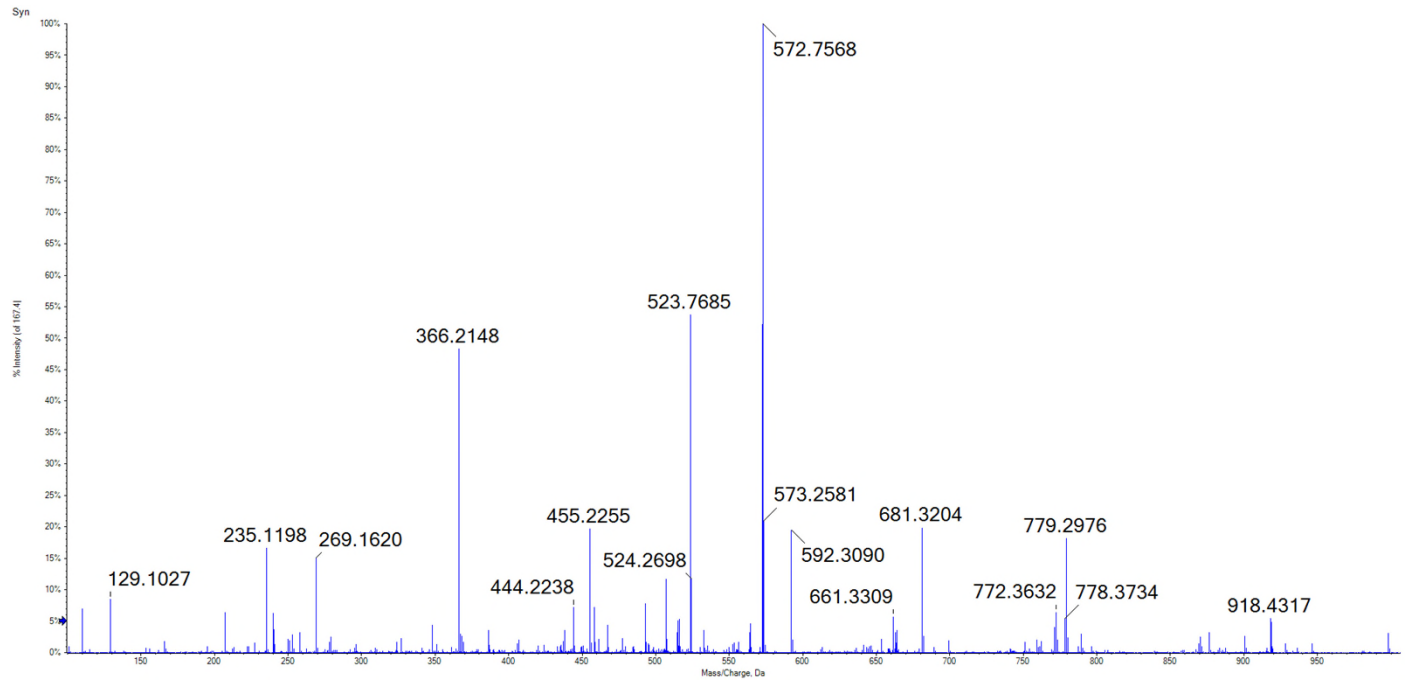
Candidate
Spectrum



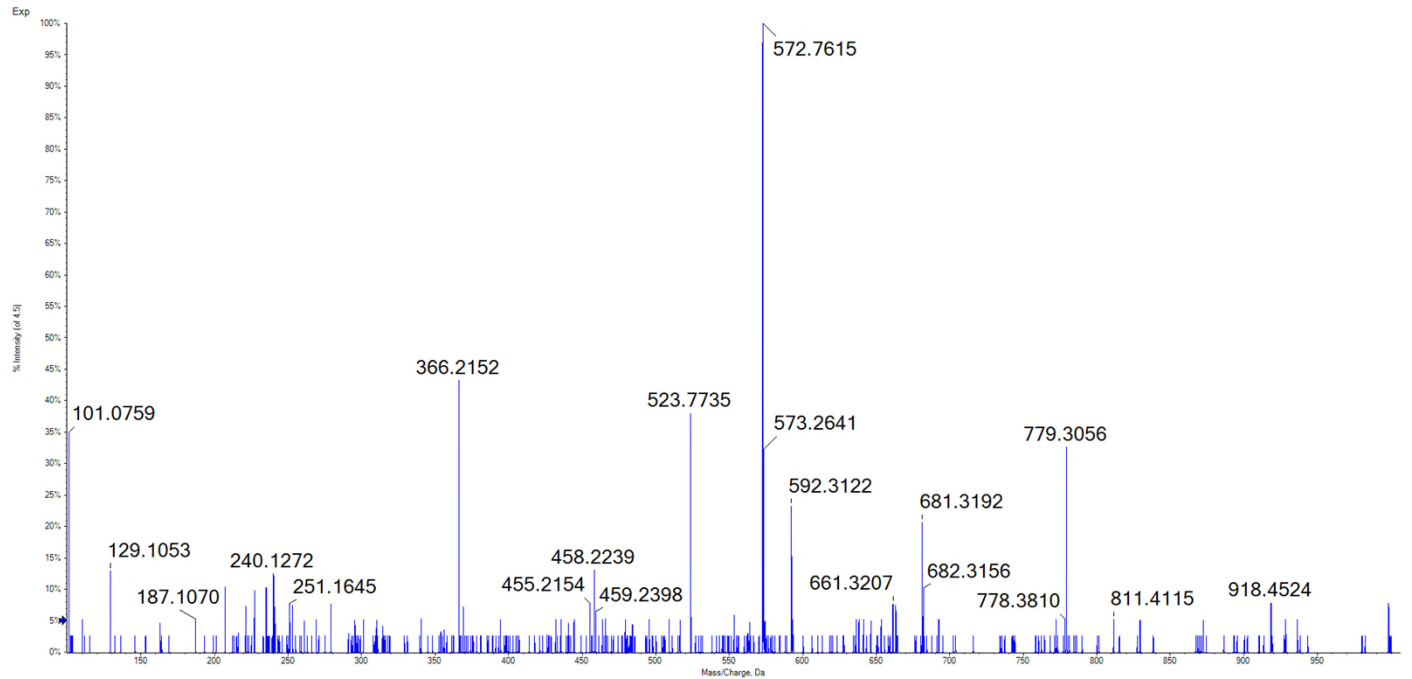
63

KEQ(pS)PEPHL

Synthetic
Peptide



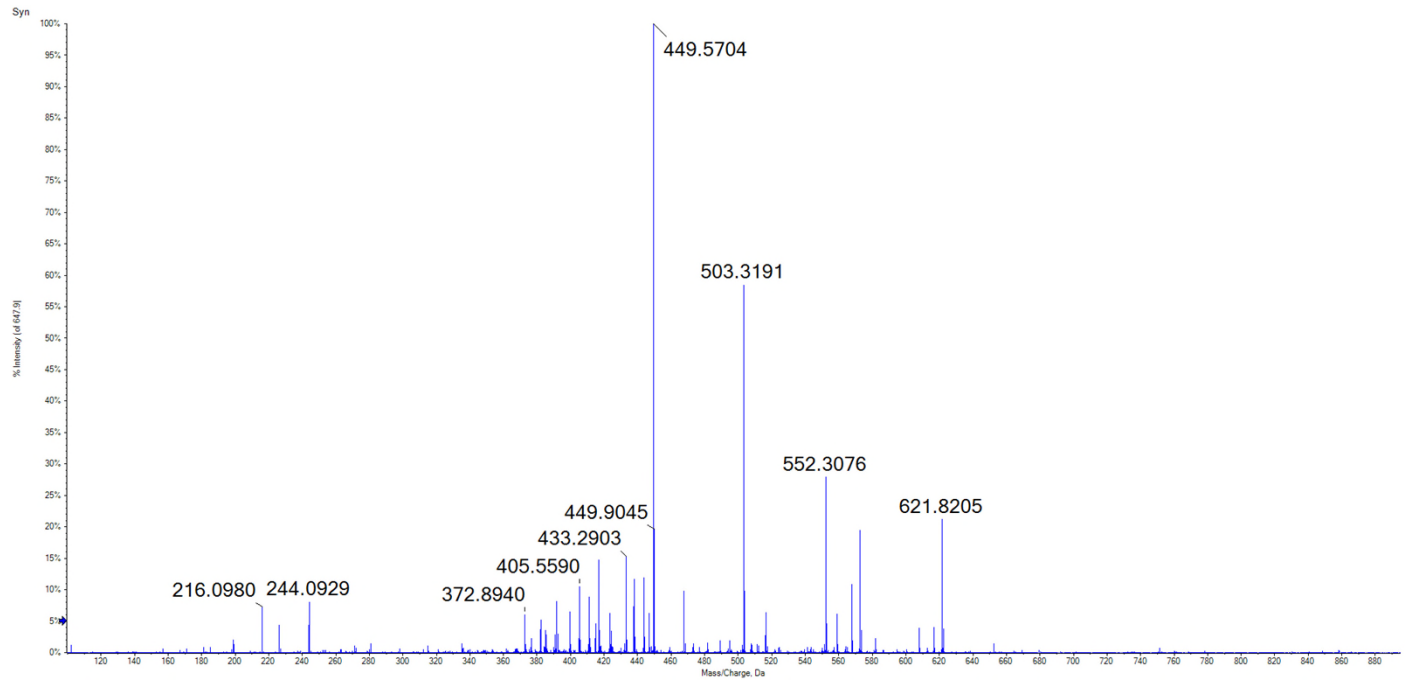
Candidate
Spectrum



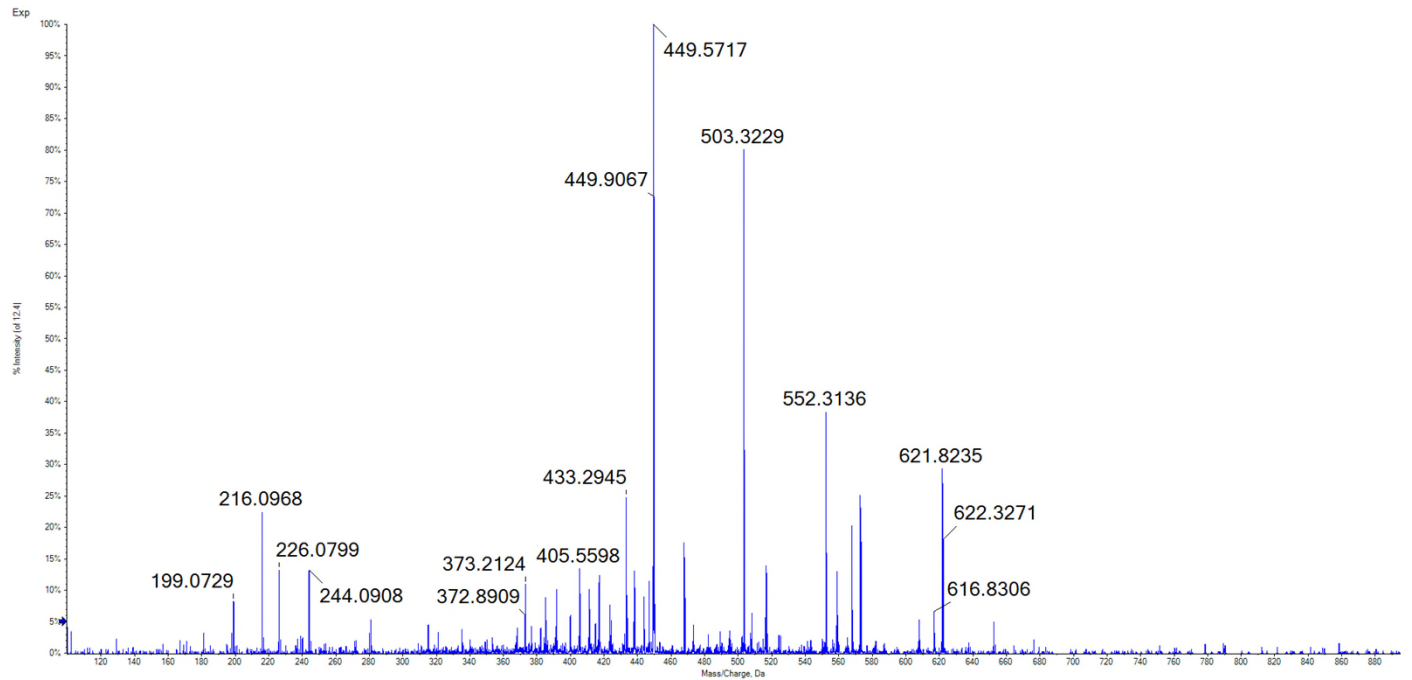
64

NEA(pS)PVKRPRL

Synthetic
Peptide



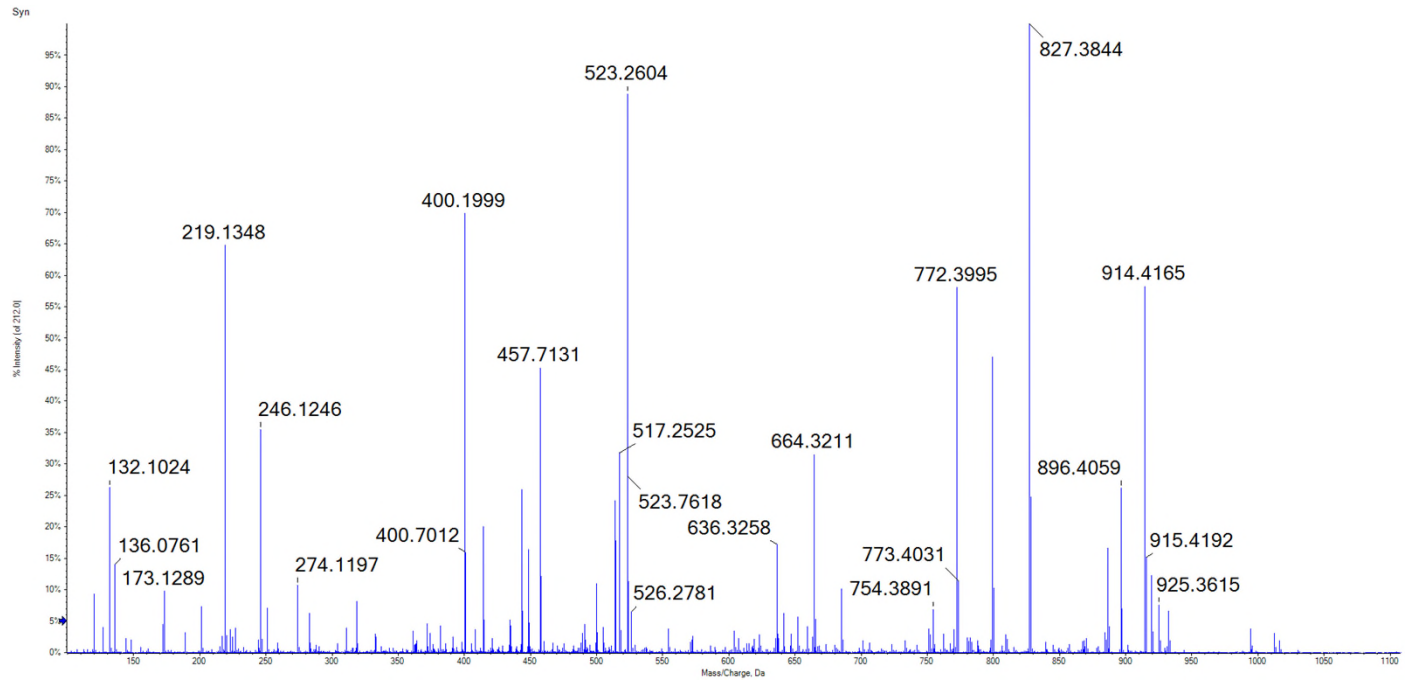
Candidate
Spectrum



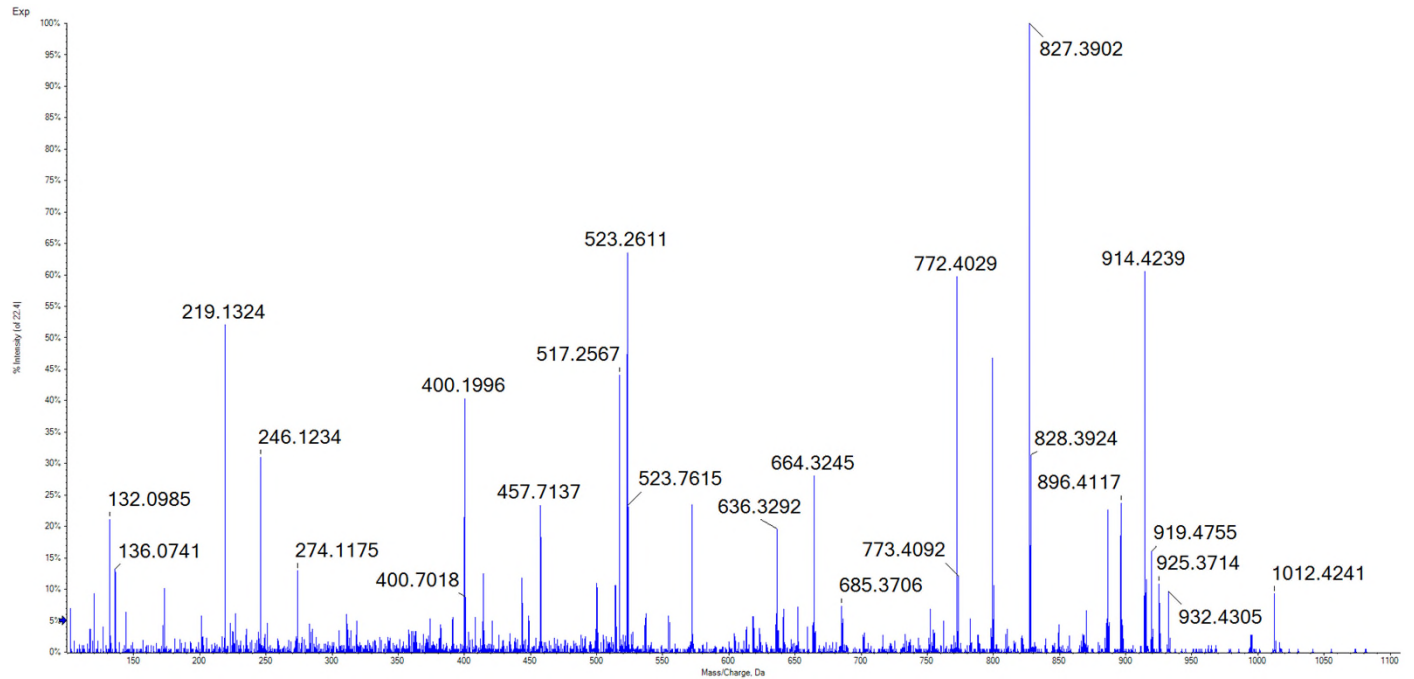
65

G(pS)FSRFYSL

Synthetic
Peptide

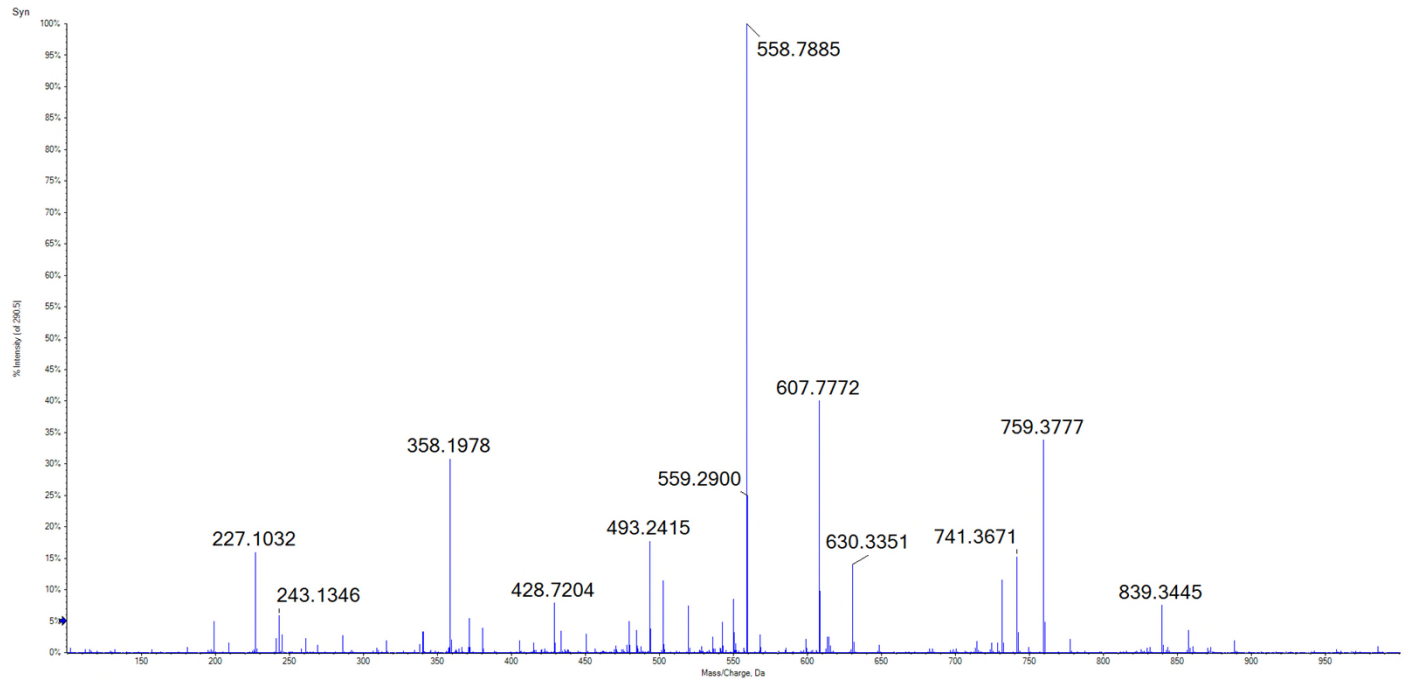


Candidate
Spectrum

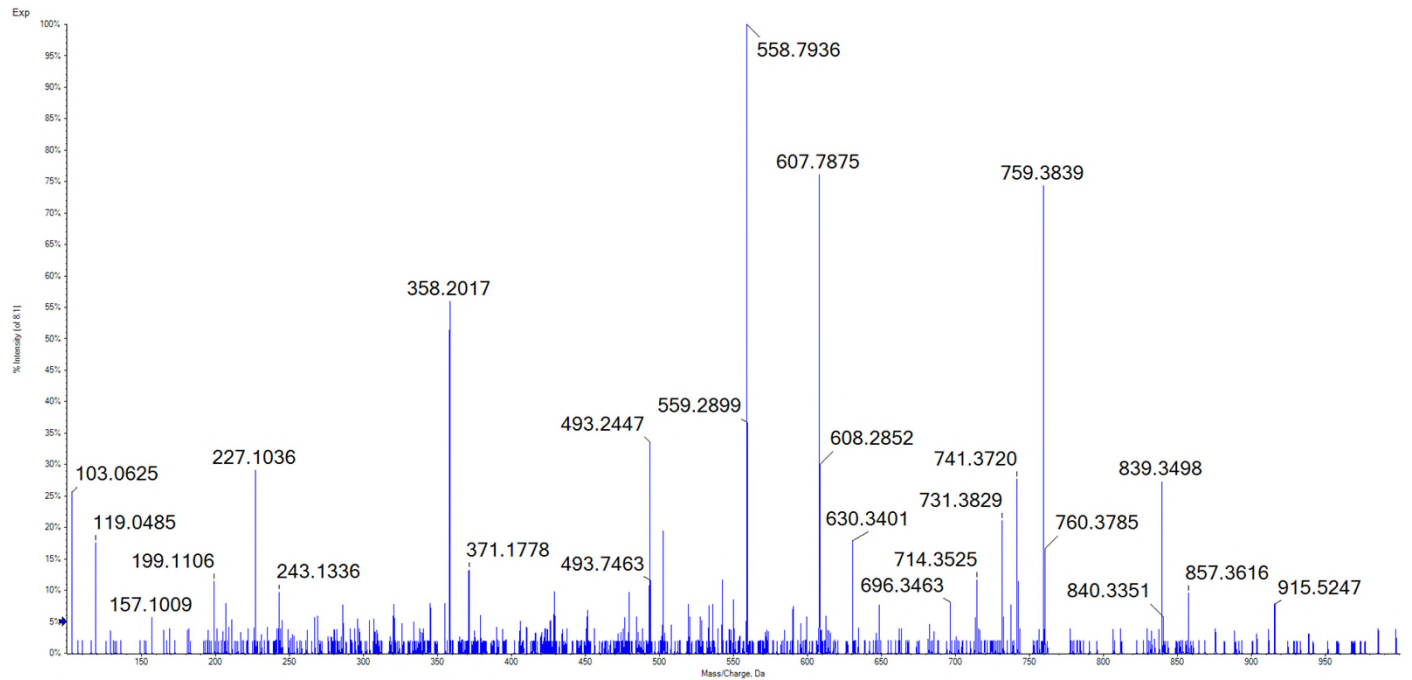


66 REF(pS)KEPEL

Synthetic
Peptide



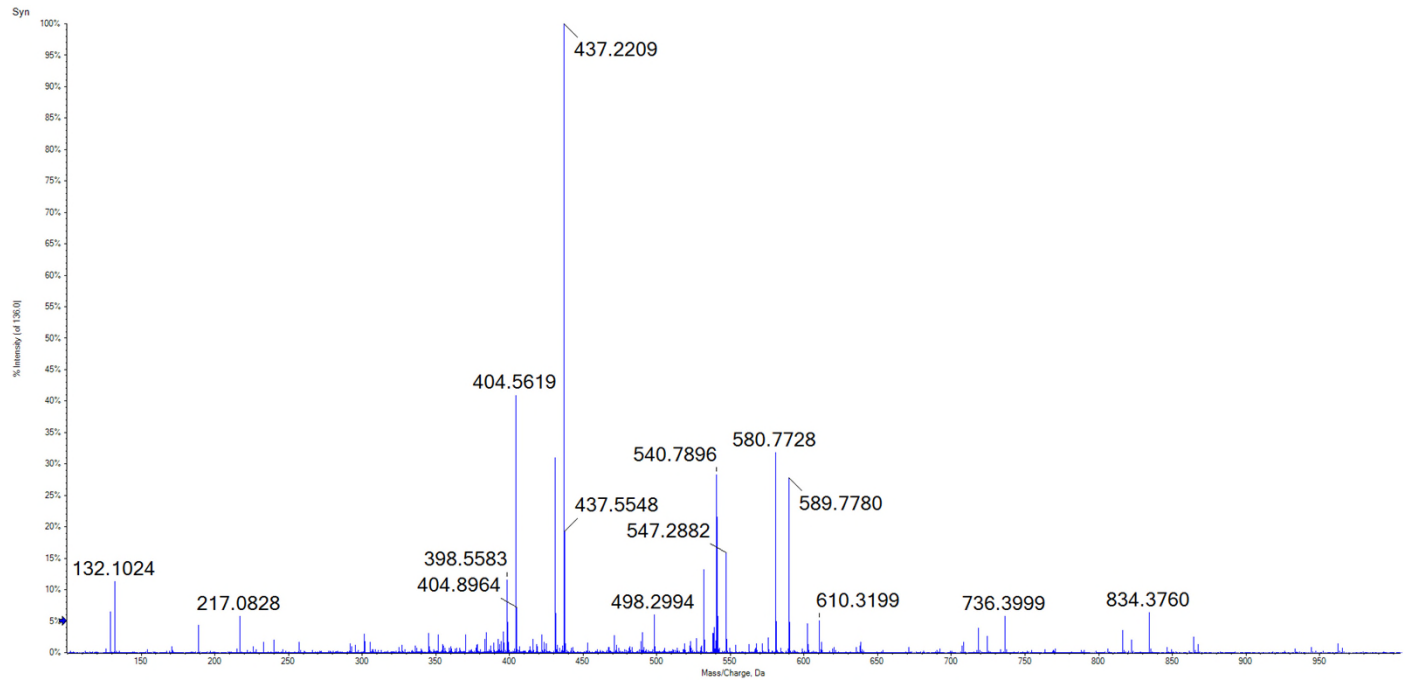
Candidate
Spectrum



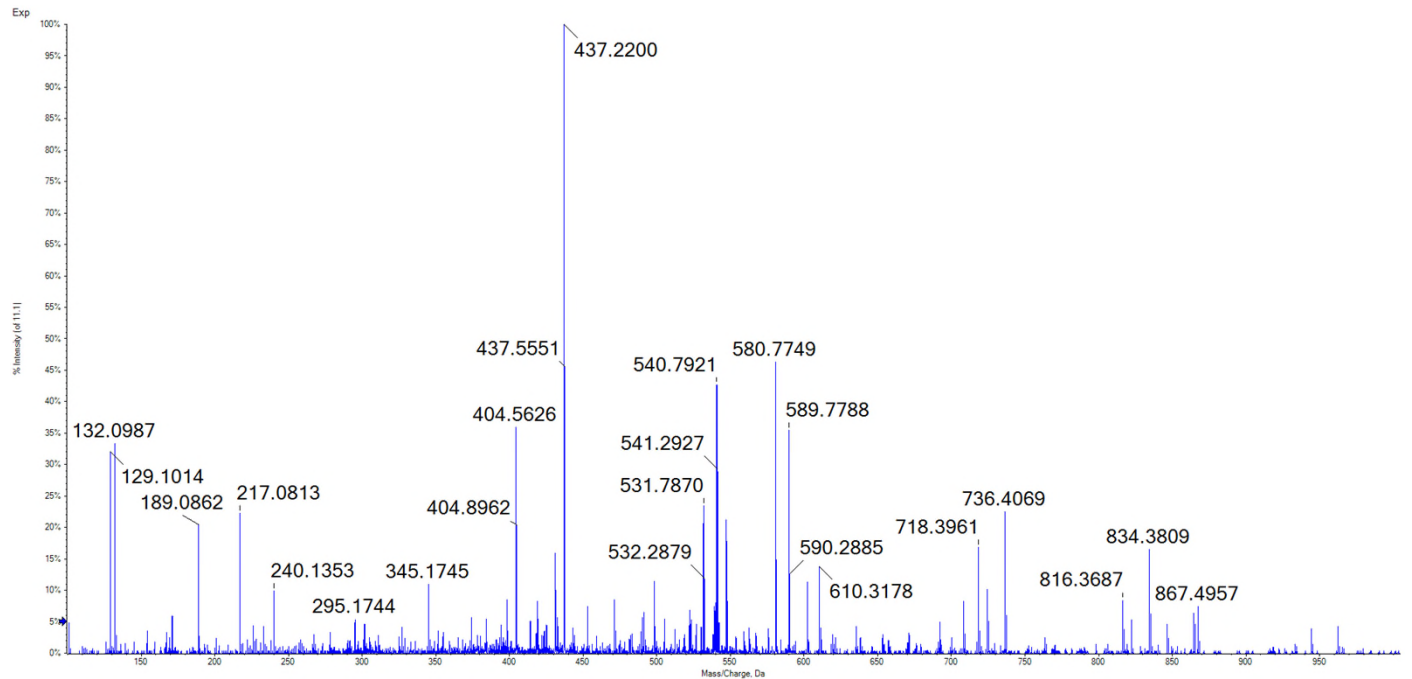
67

SEKPV(pS)PKSGTL

Synthetic
Peptide

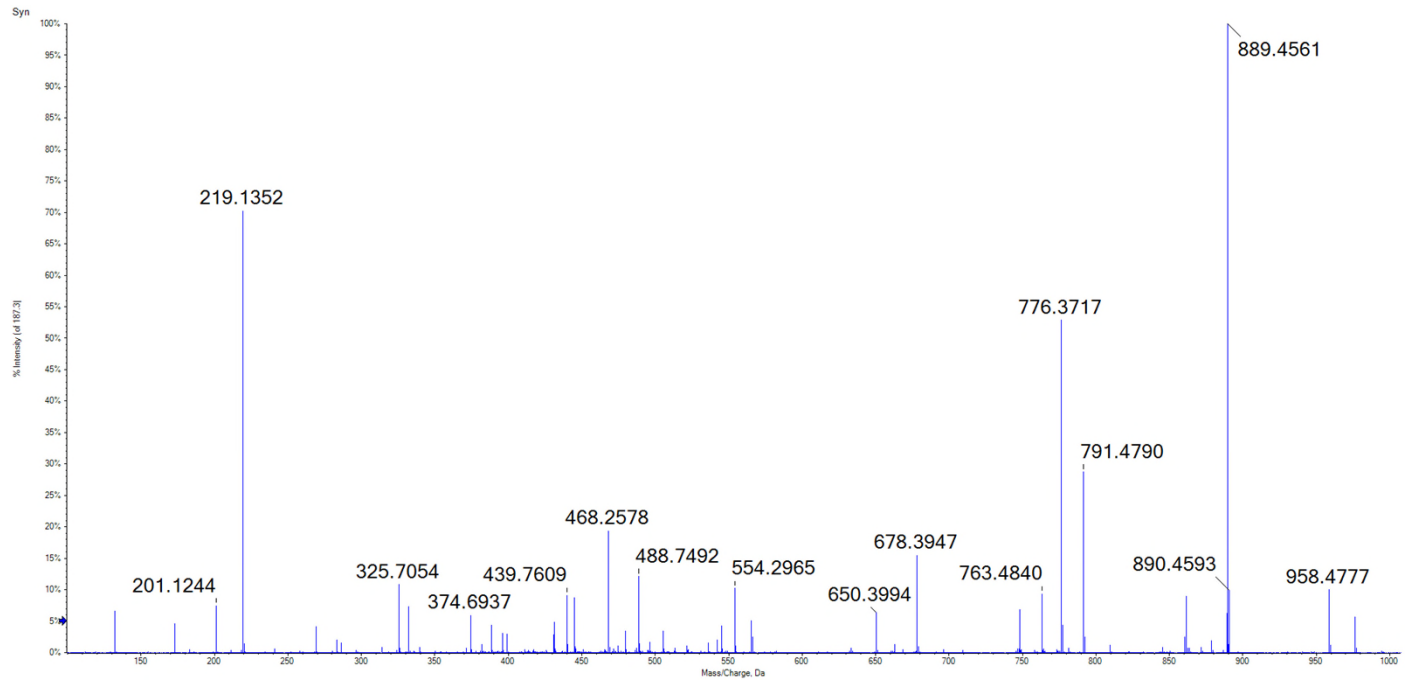


Candidate
Spectrum

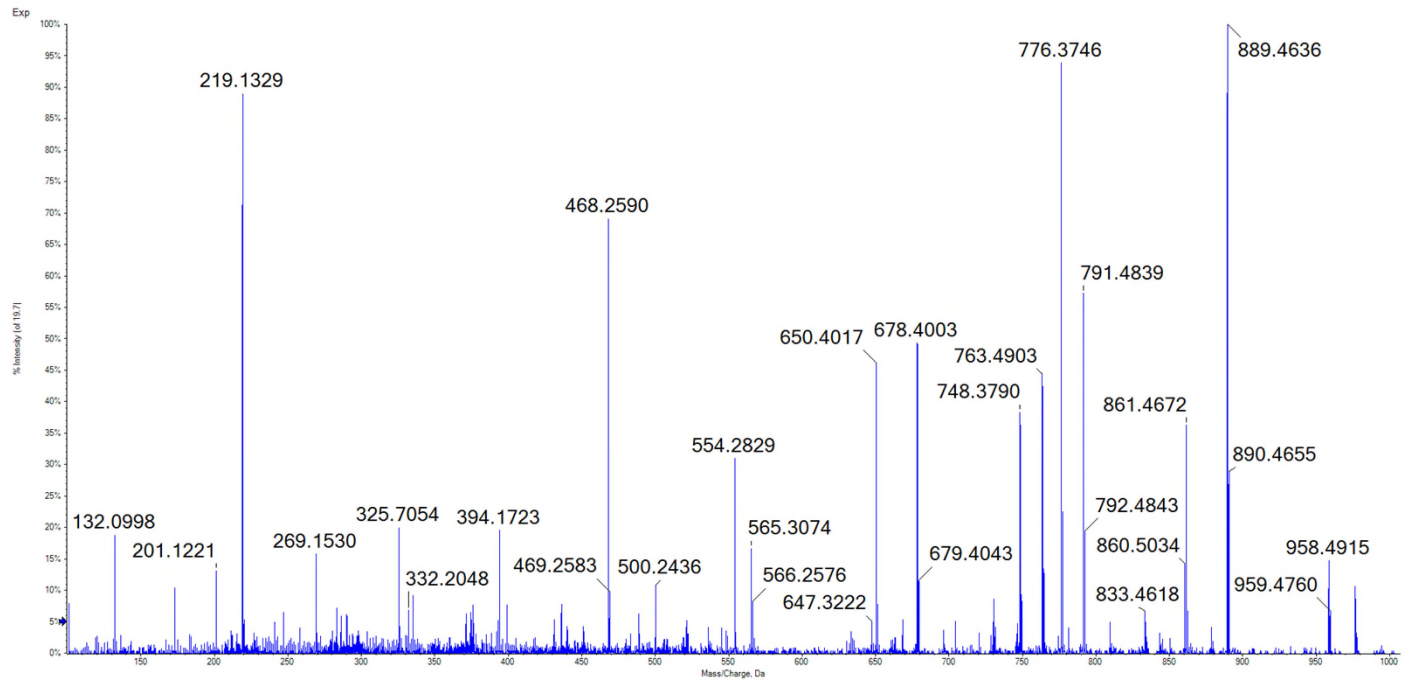


68 REL(pS)PLISL

Synthetic
Peptide



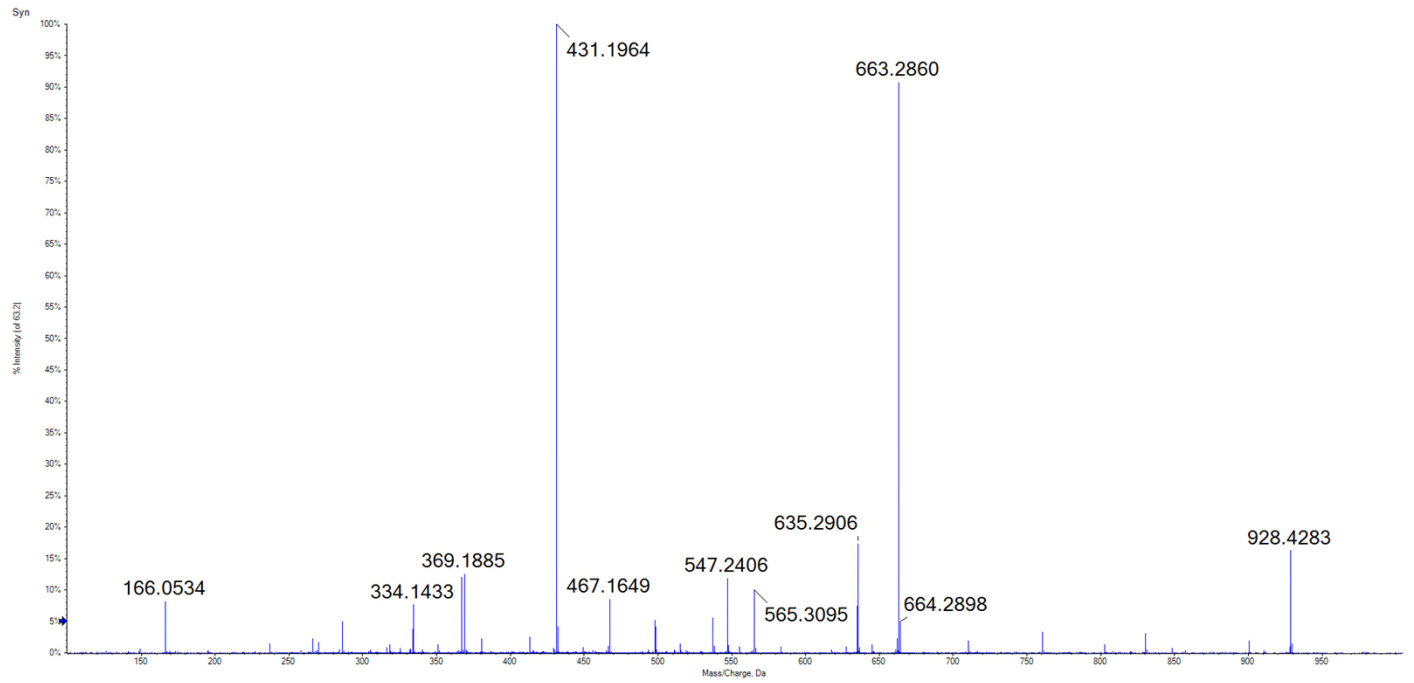
Candidate
Spectrum



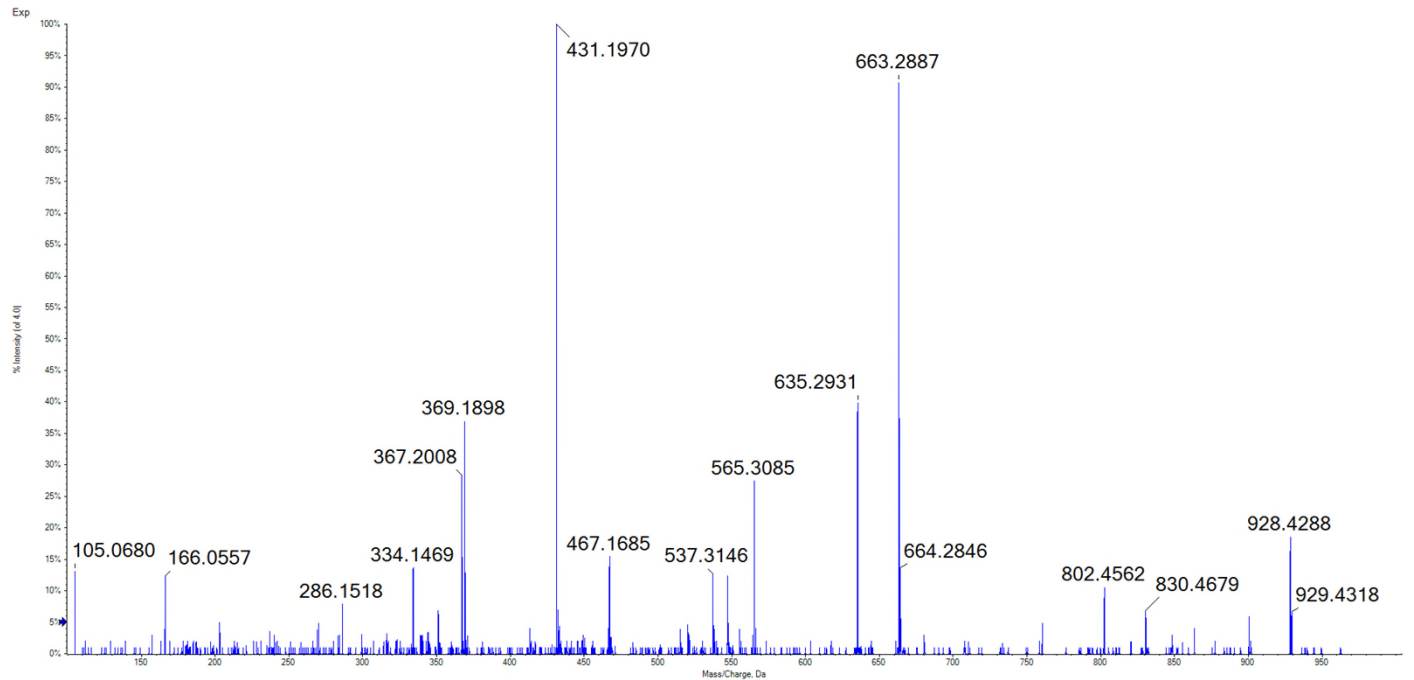
69

RE(pT)PVPPAM

Synthetic
Peptide



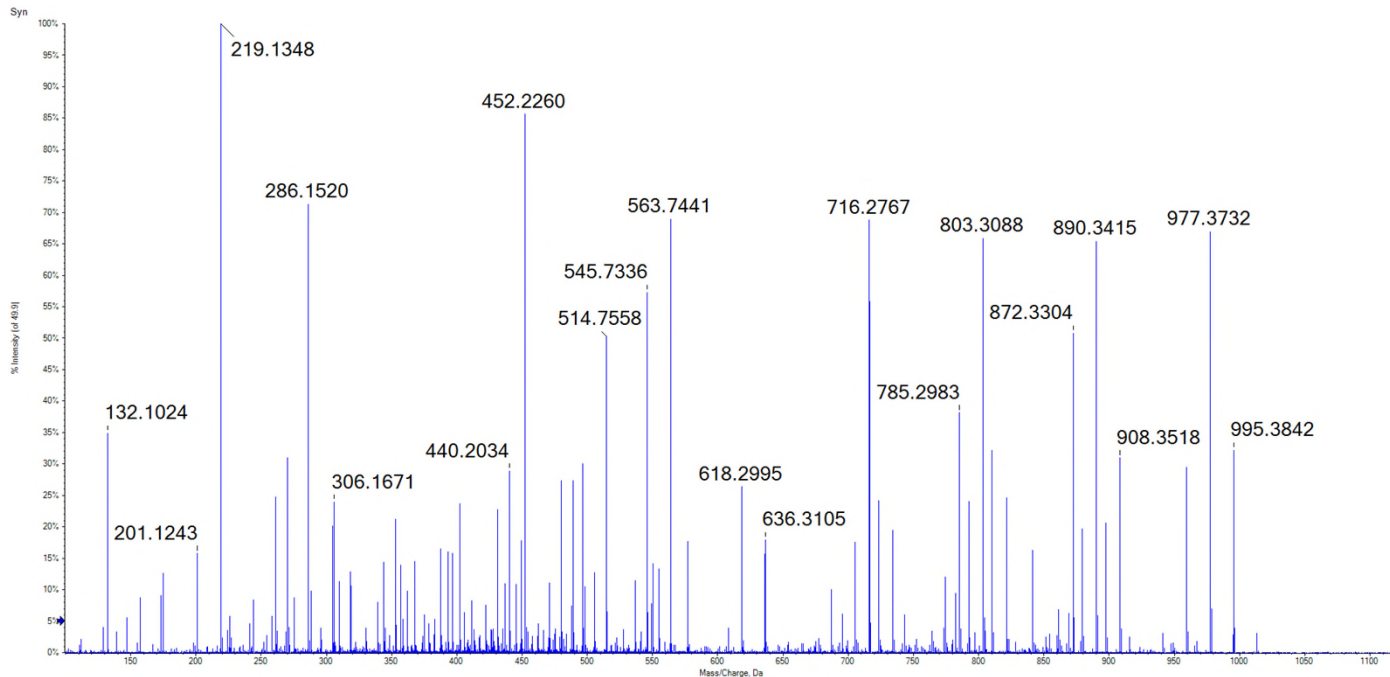
Candidate
Spectrum



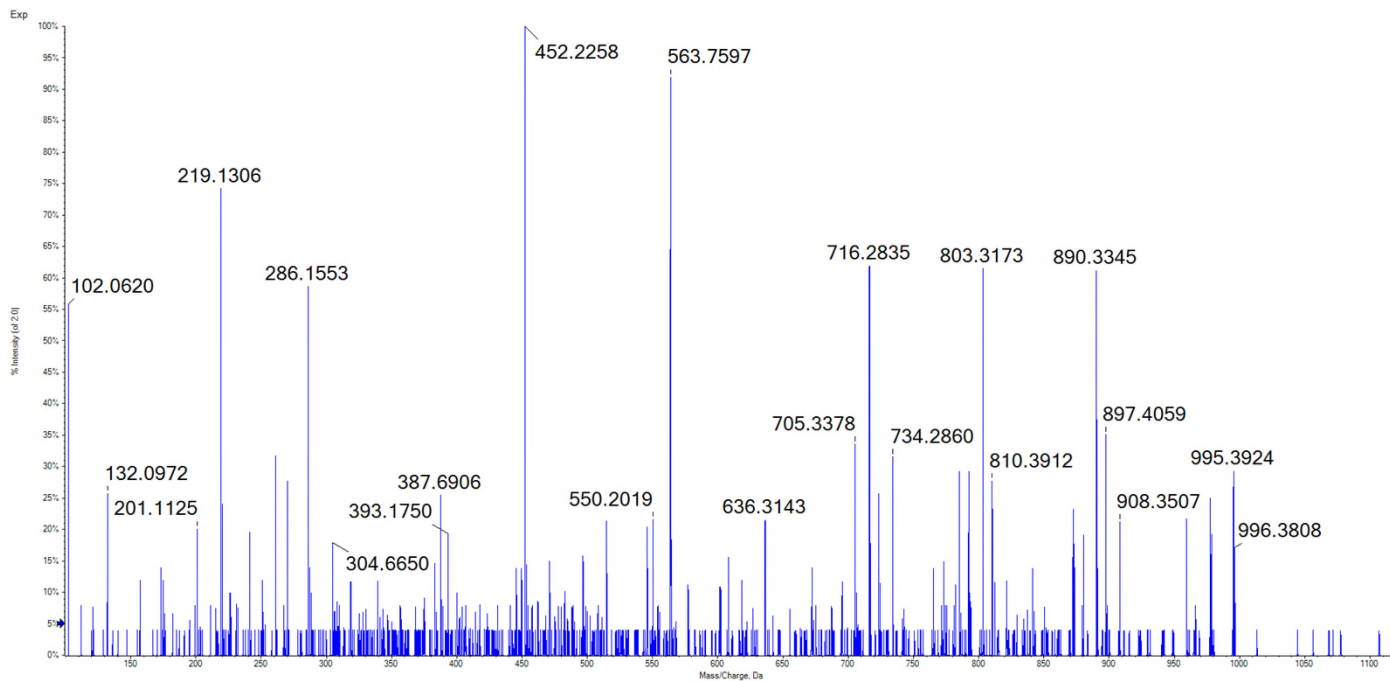
70

REP(pS)PSSSSL

Synthetic Peptide



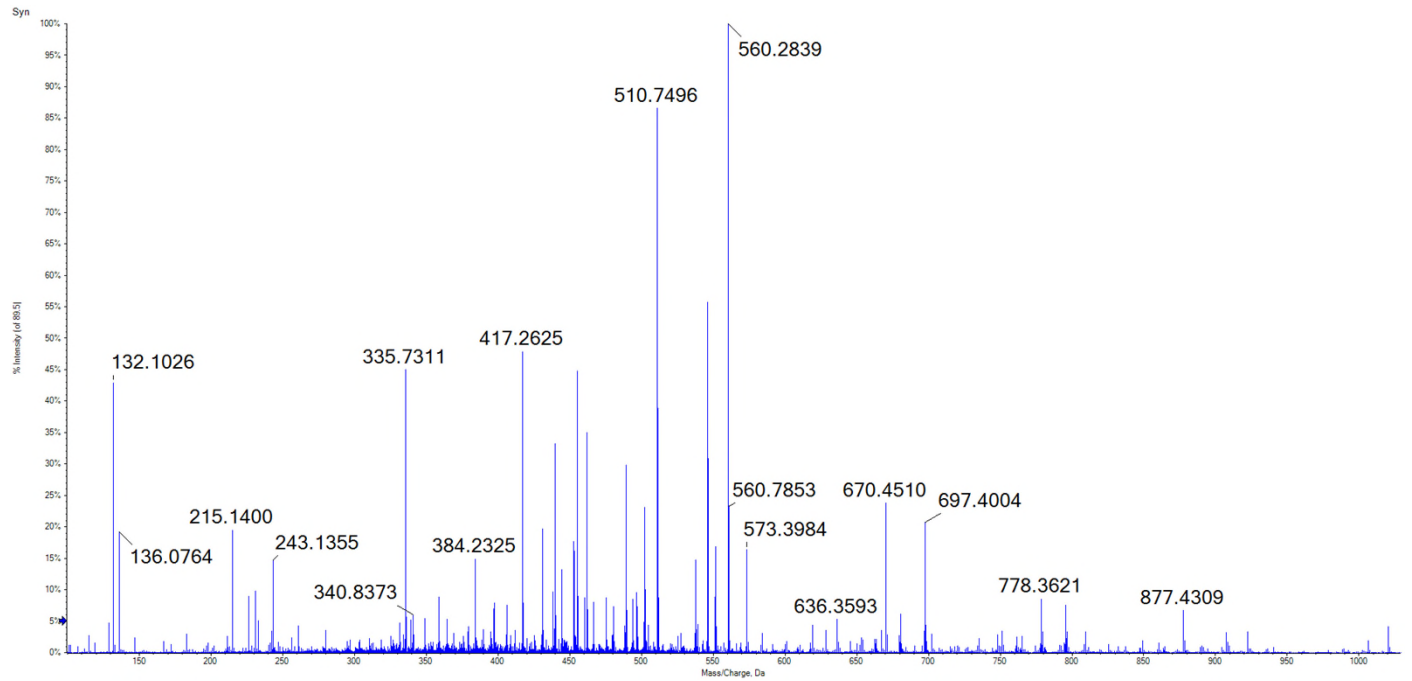
Candidate Spectrum



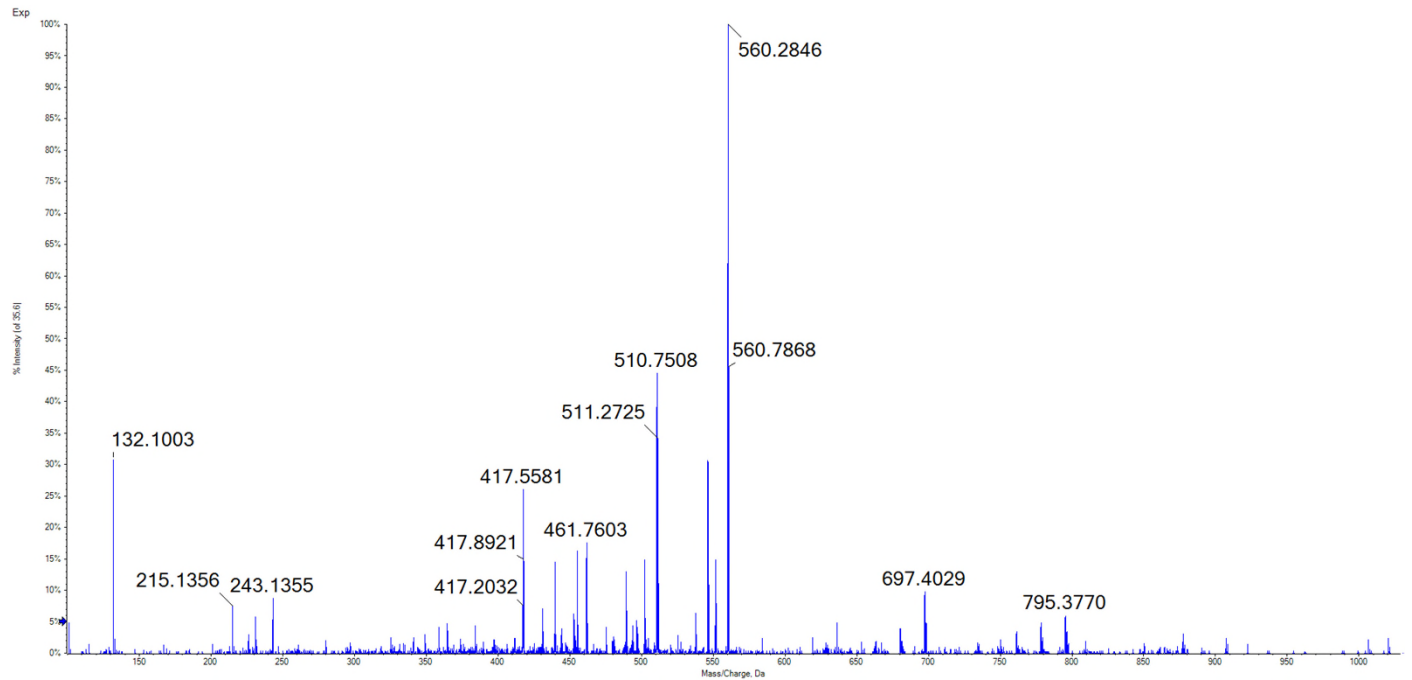
71

LEKRT(pS)PQVL

Synthetic Peptide



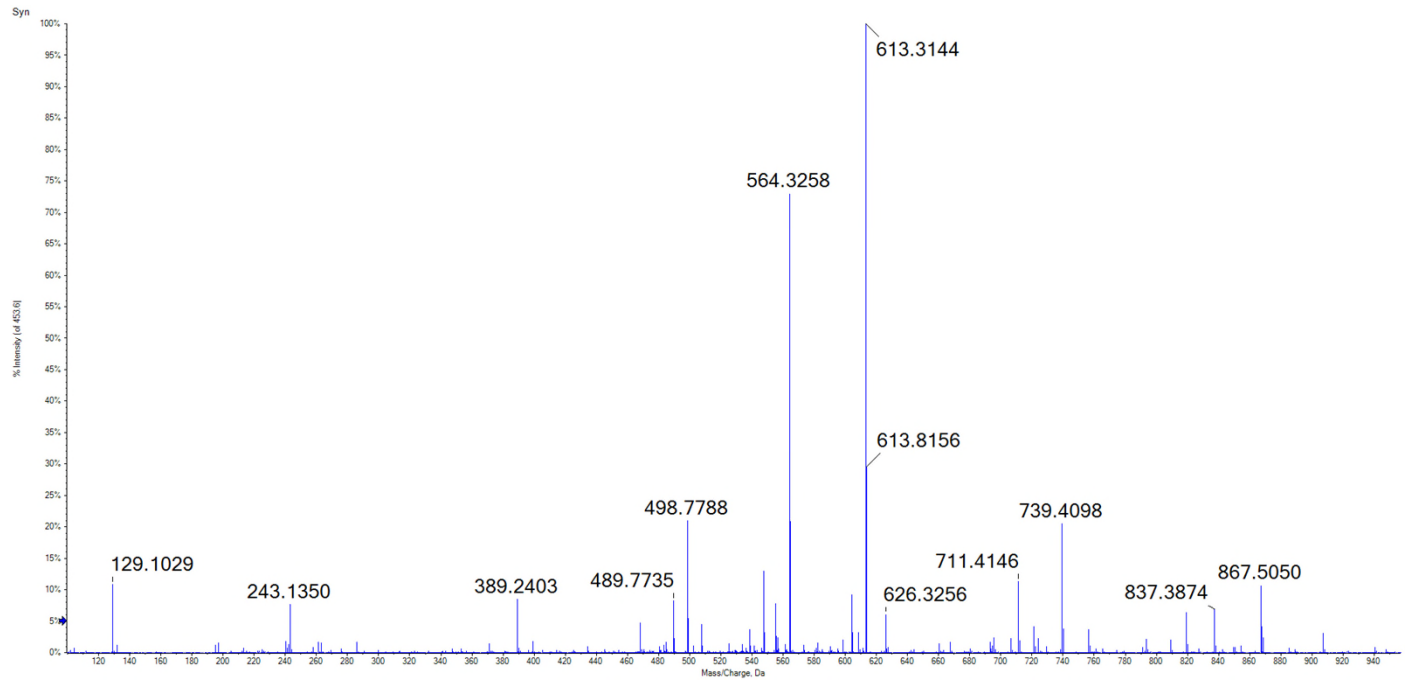
Candidate Spectrum



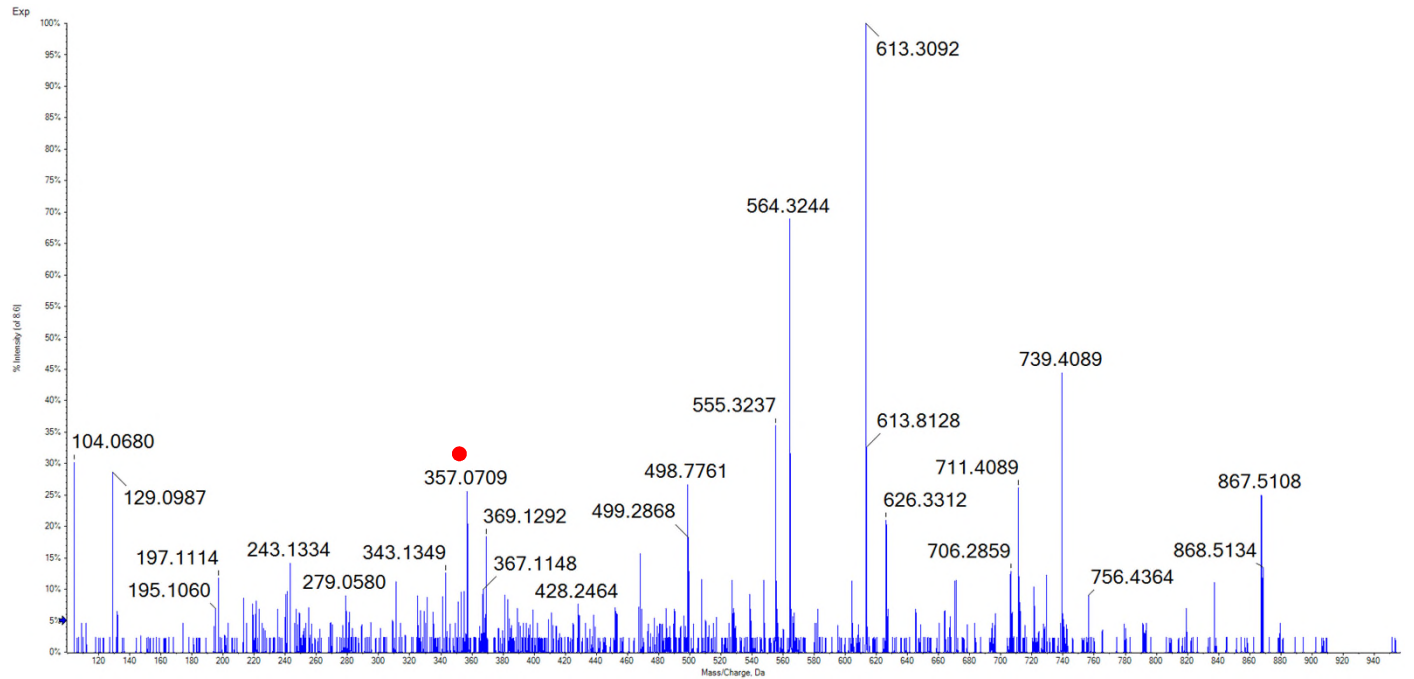
72

REL(pS)GTIKEI

Synthetic
Peptide



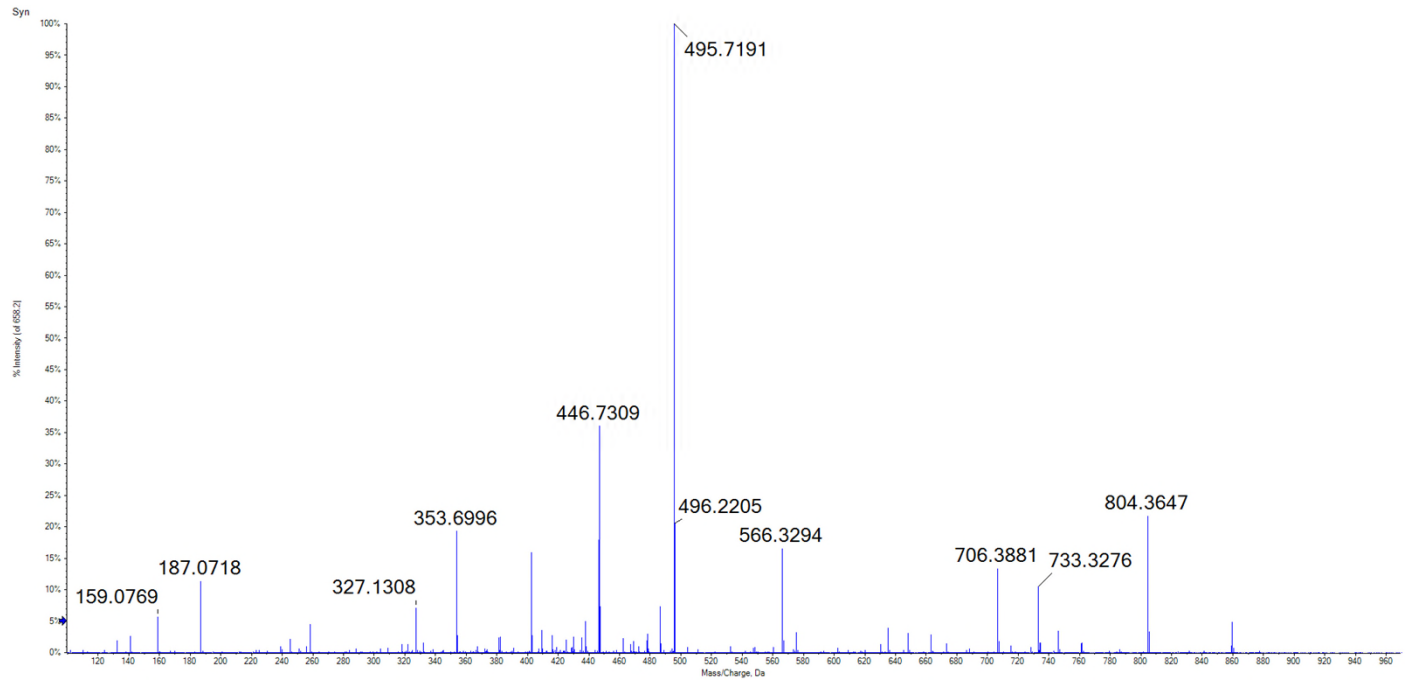
Candidate
Spectrum



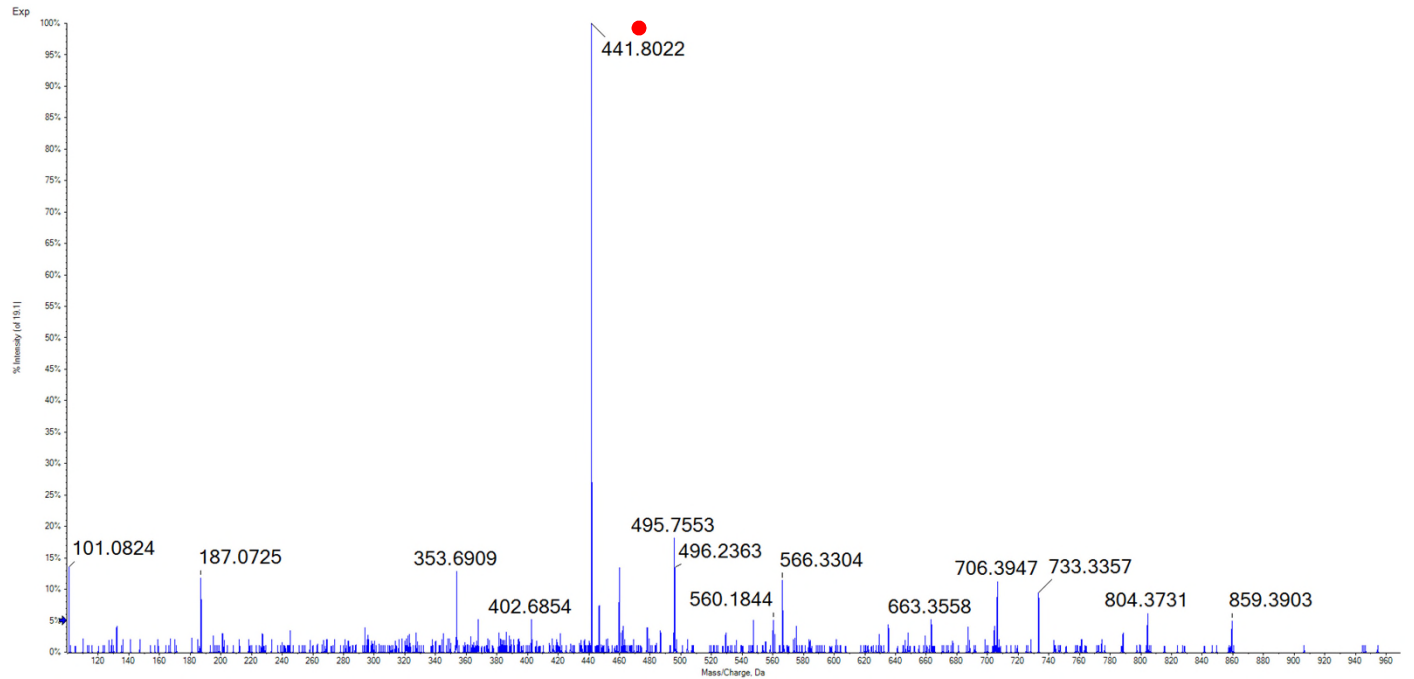
73

GEA(pS)PSHII

Synthetic
Peptide



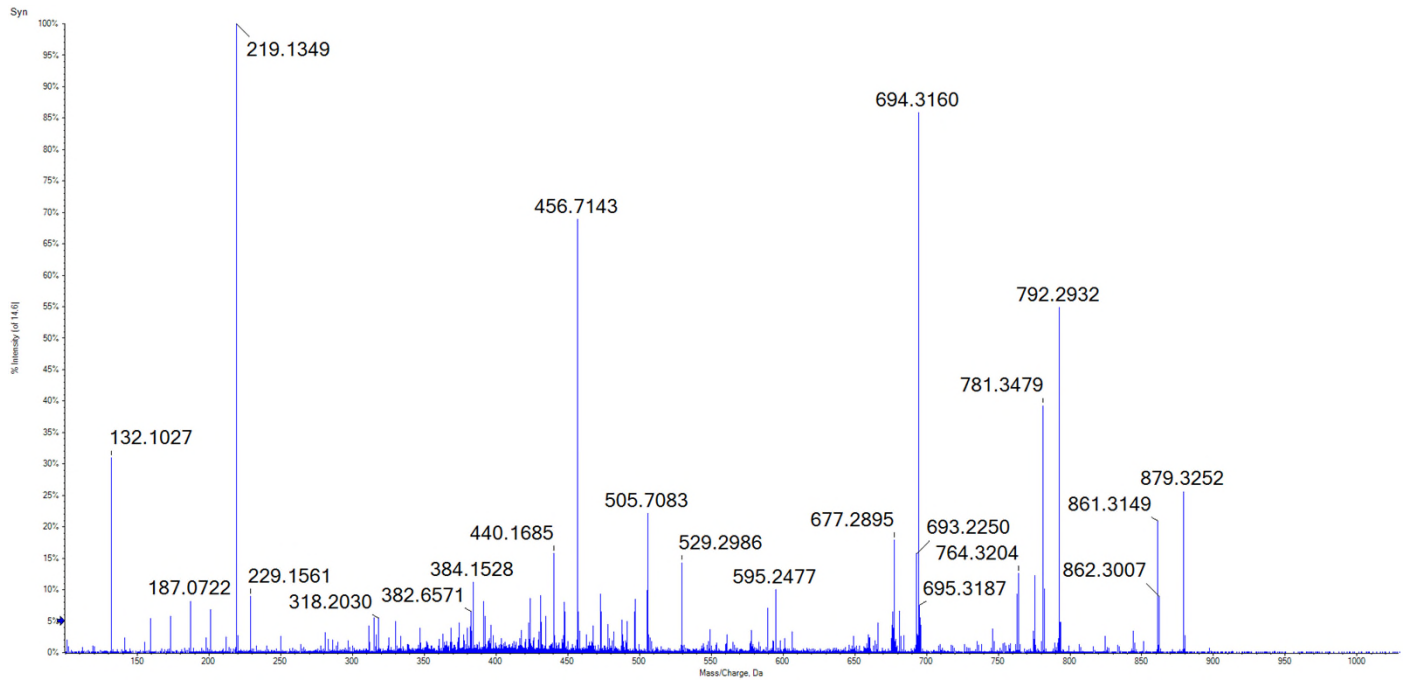
Candidate
Spectrum



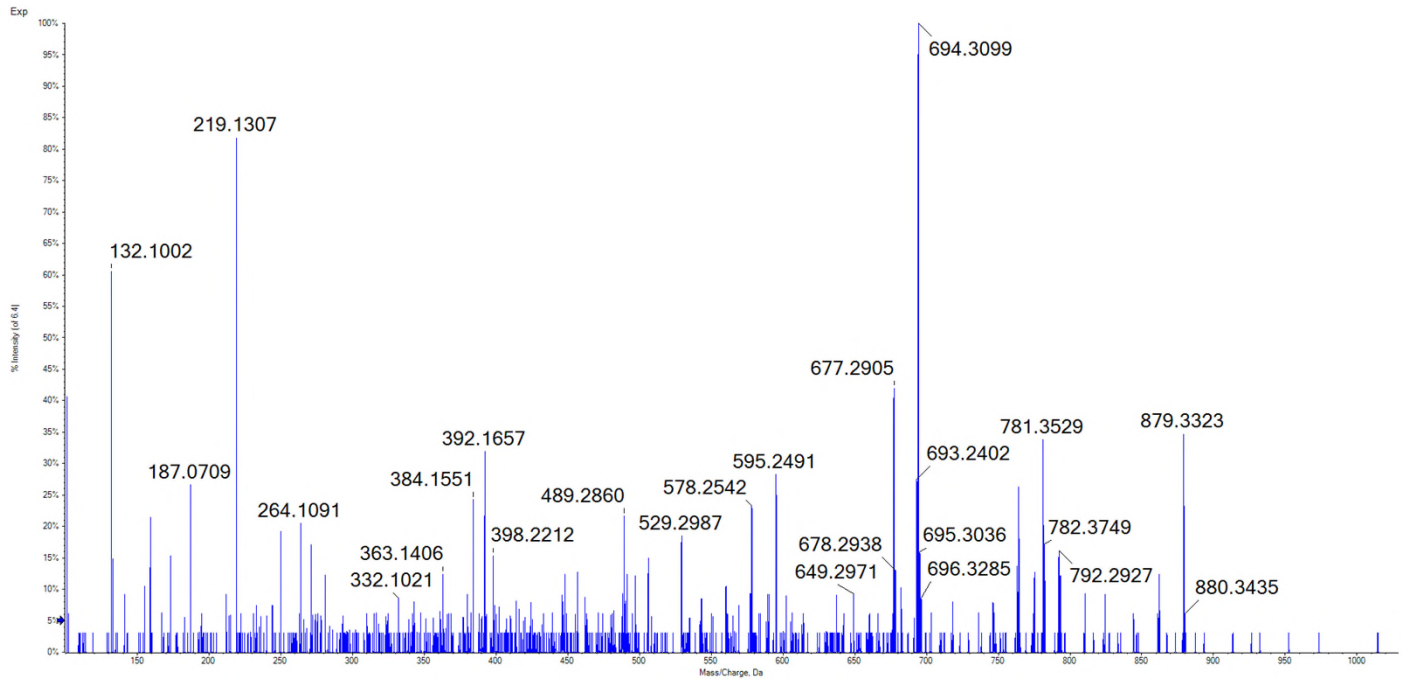
74

GEQ(pS)PNVSL

Synthetic Peptide

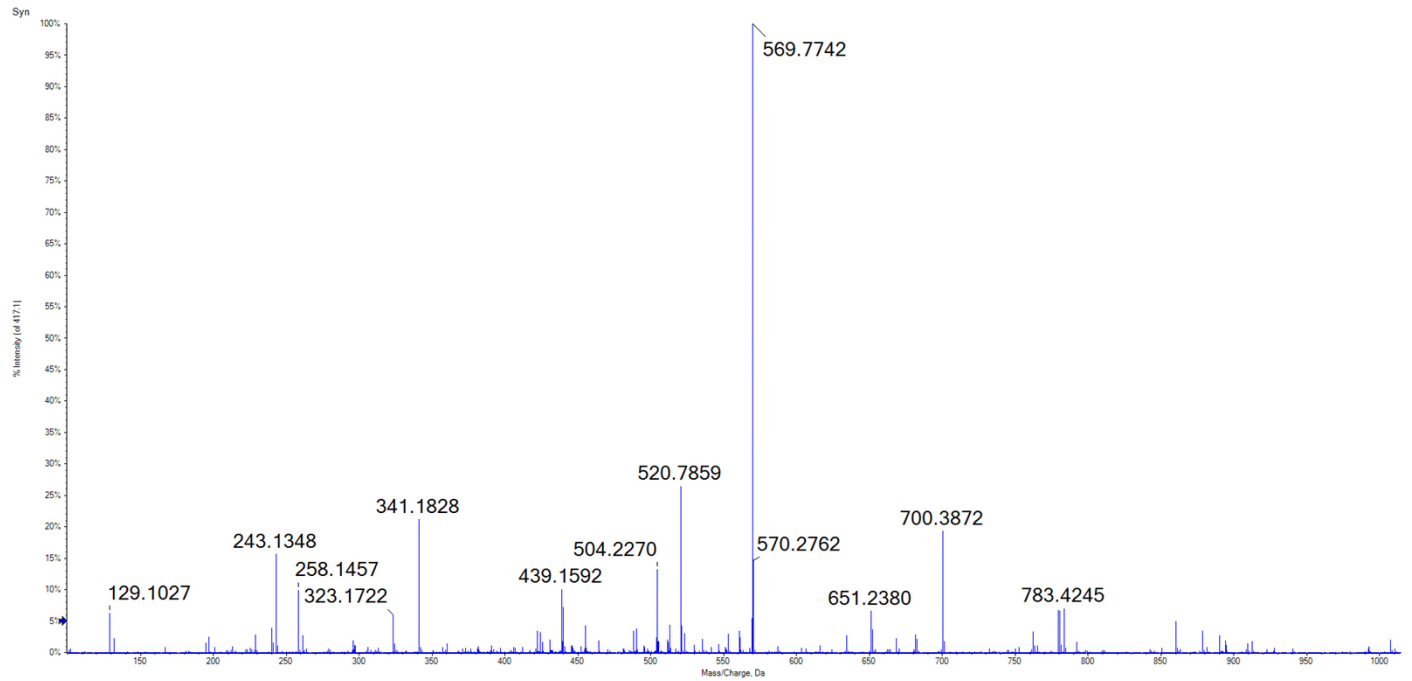


Candidate Spectrum

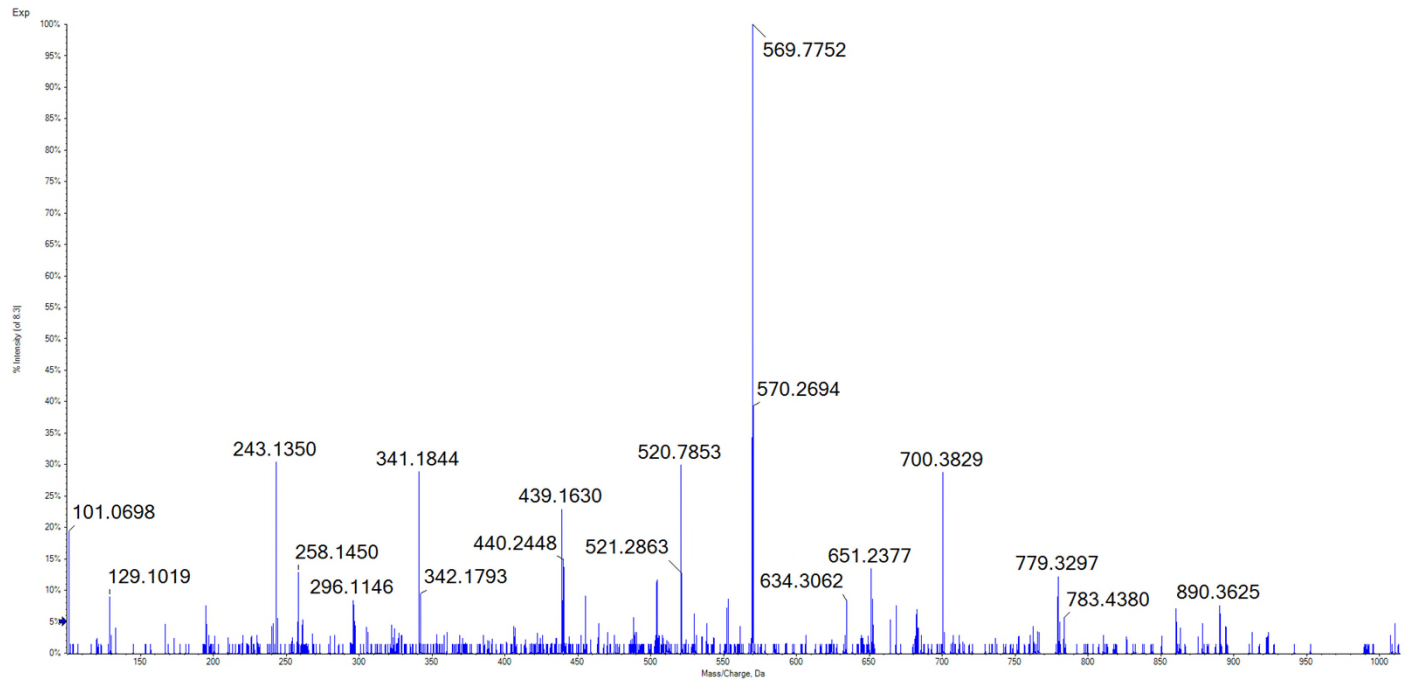


75 KE(pT)PDKVEL

Synthetic
Peptide

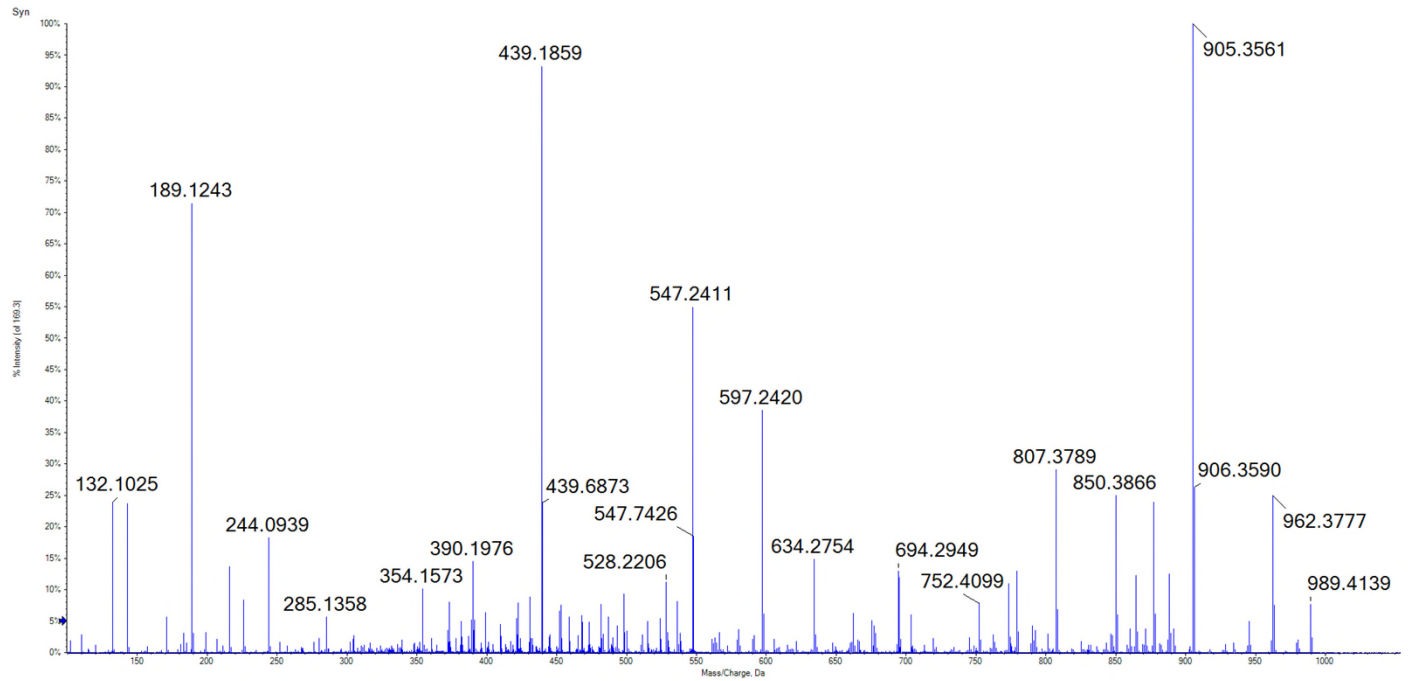


Candidate
Spectrum

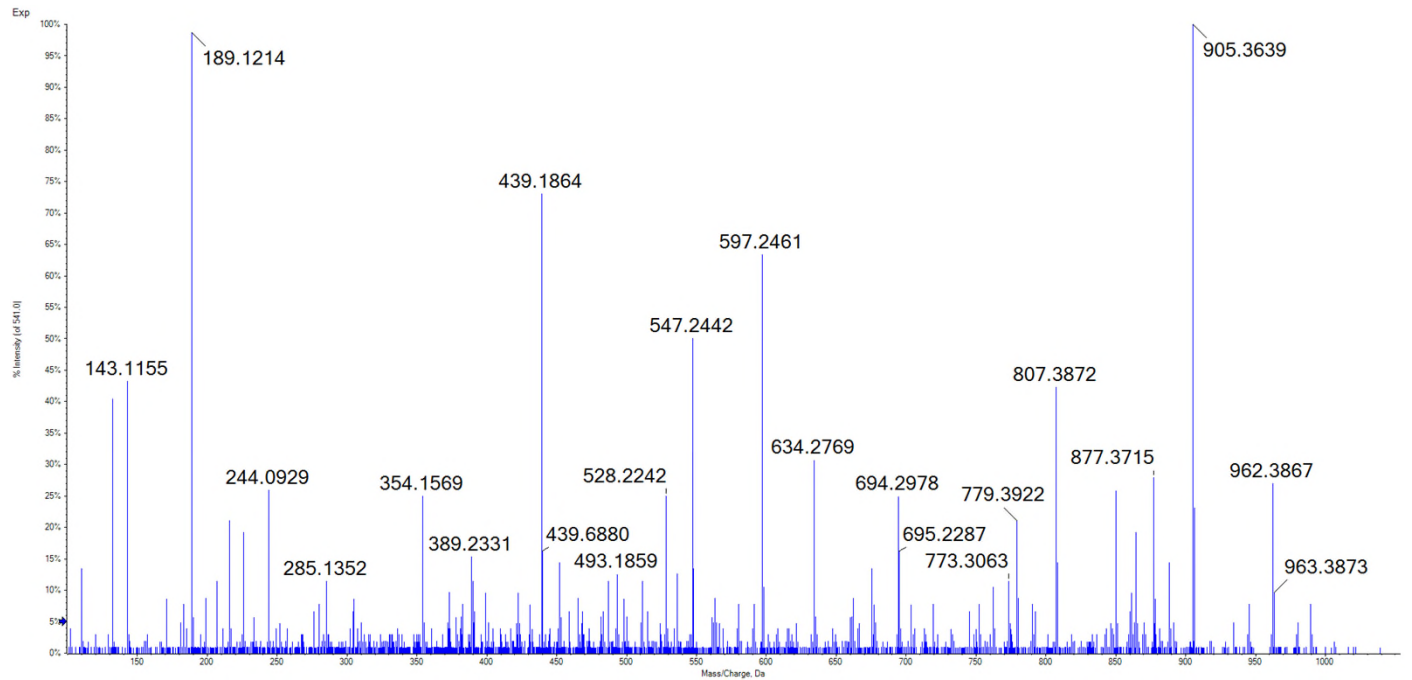


76 NEFH(pS)PIGL

Synthetic
Peptide

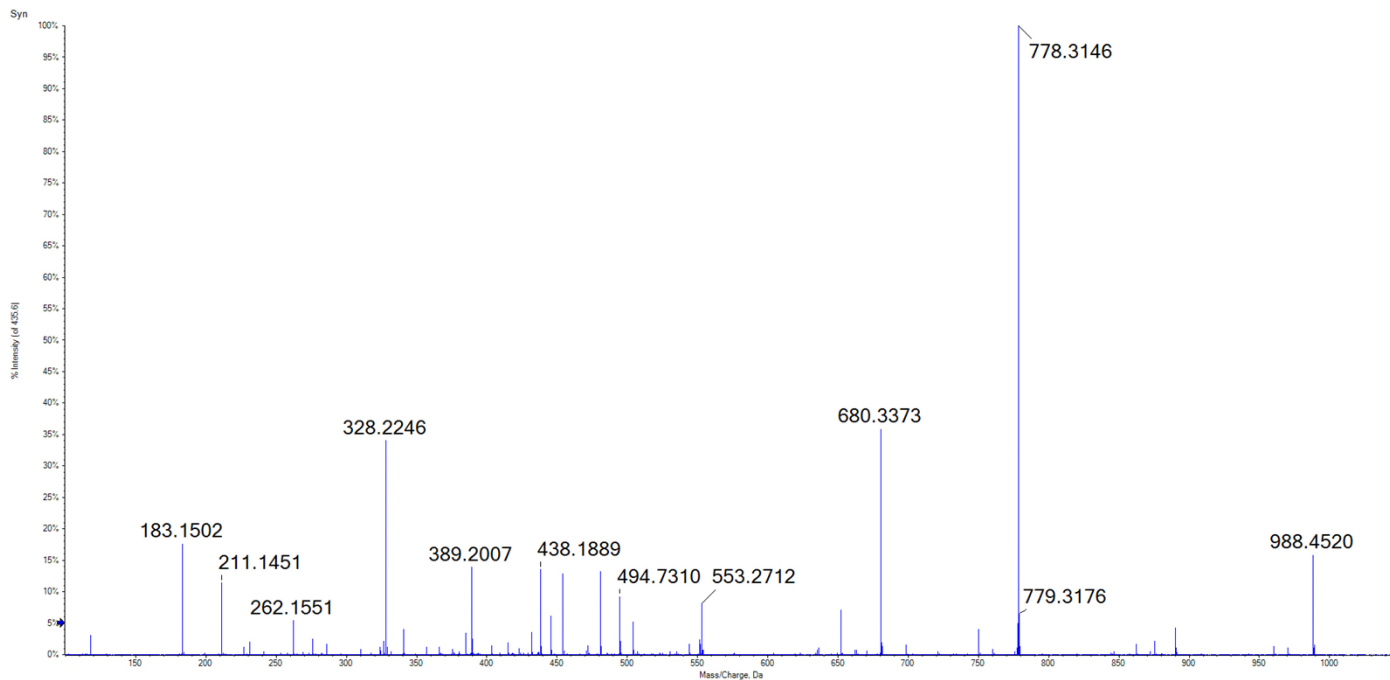


Candidate
Spectrum

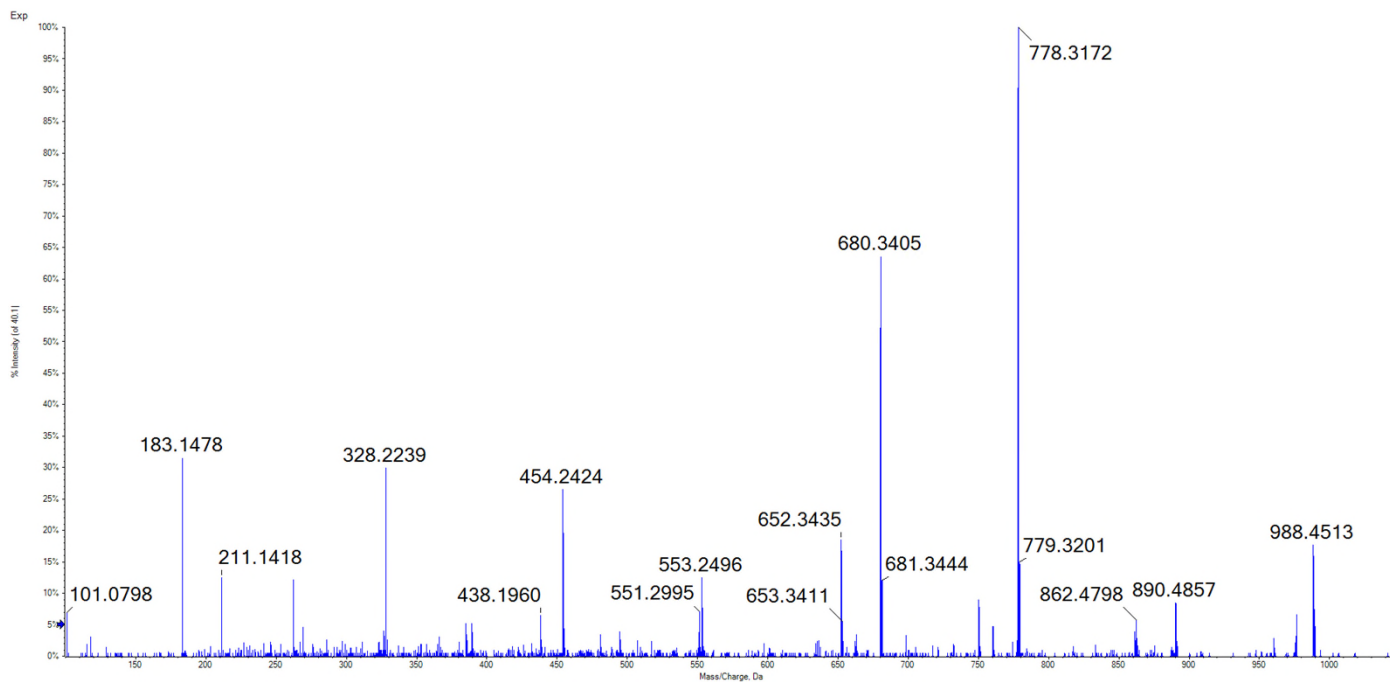


77 REV(pS)PEPIV

Synthetic
Peptide

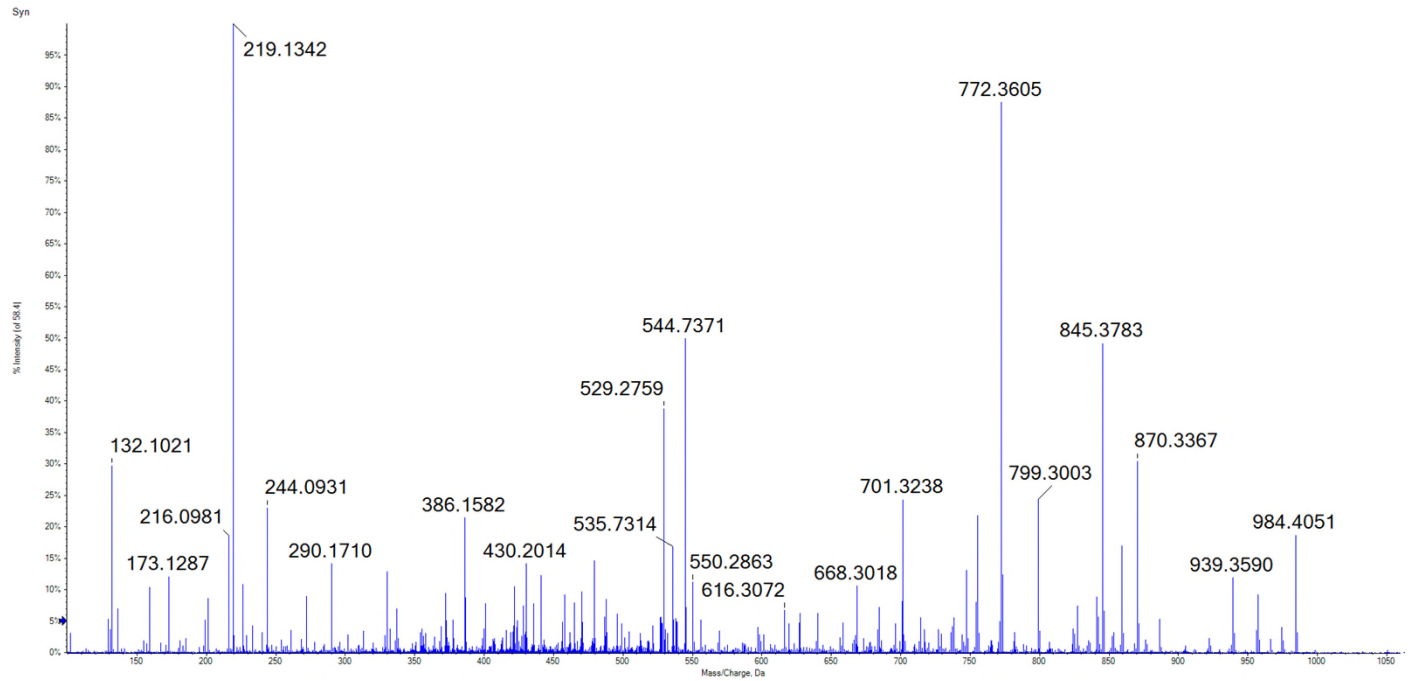


Candidate
Spectrum

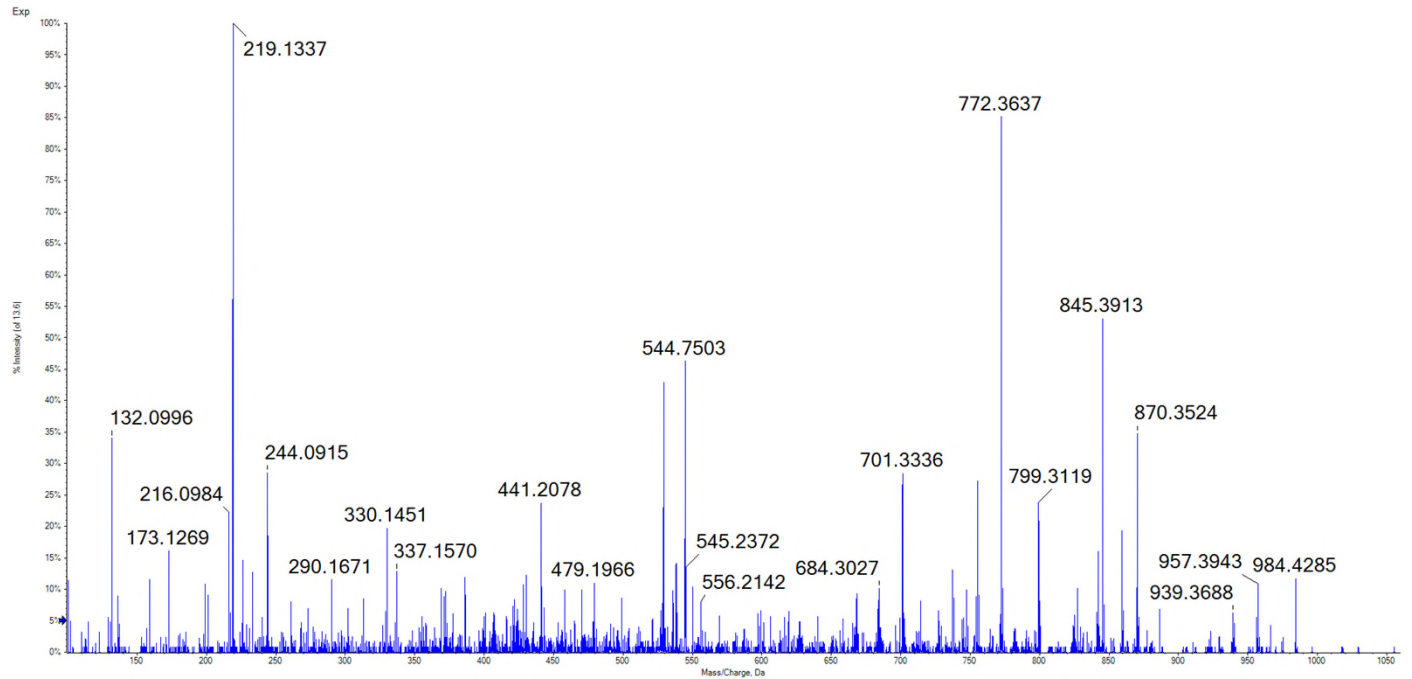


78 NEK(pS)PYASL

Synthetic
Peptide



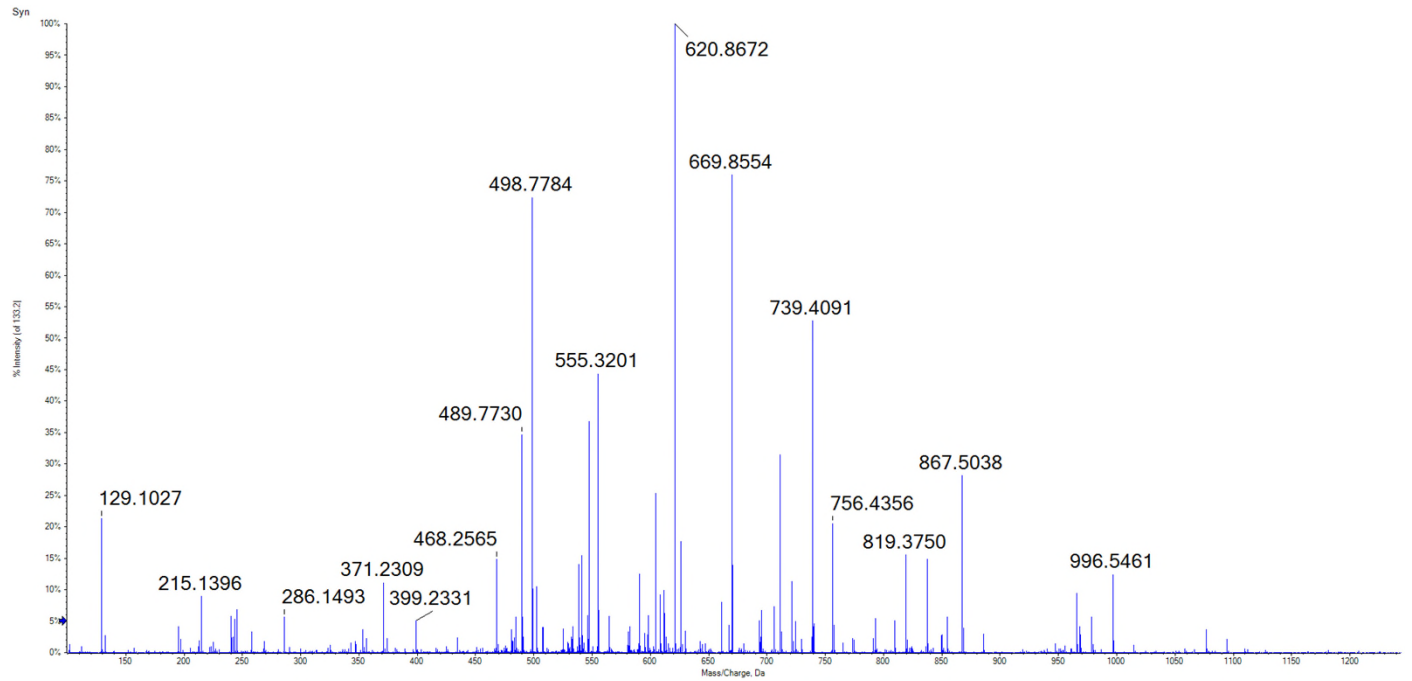
Candidate
Spectrum



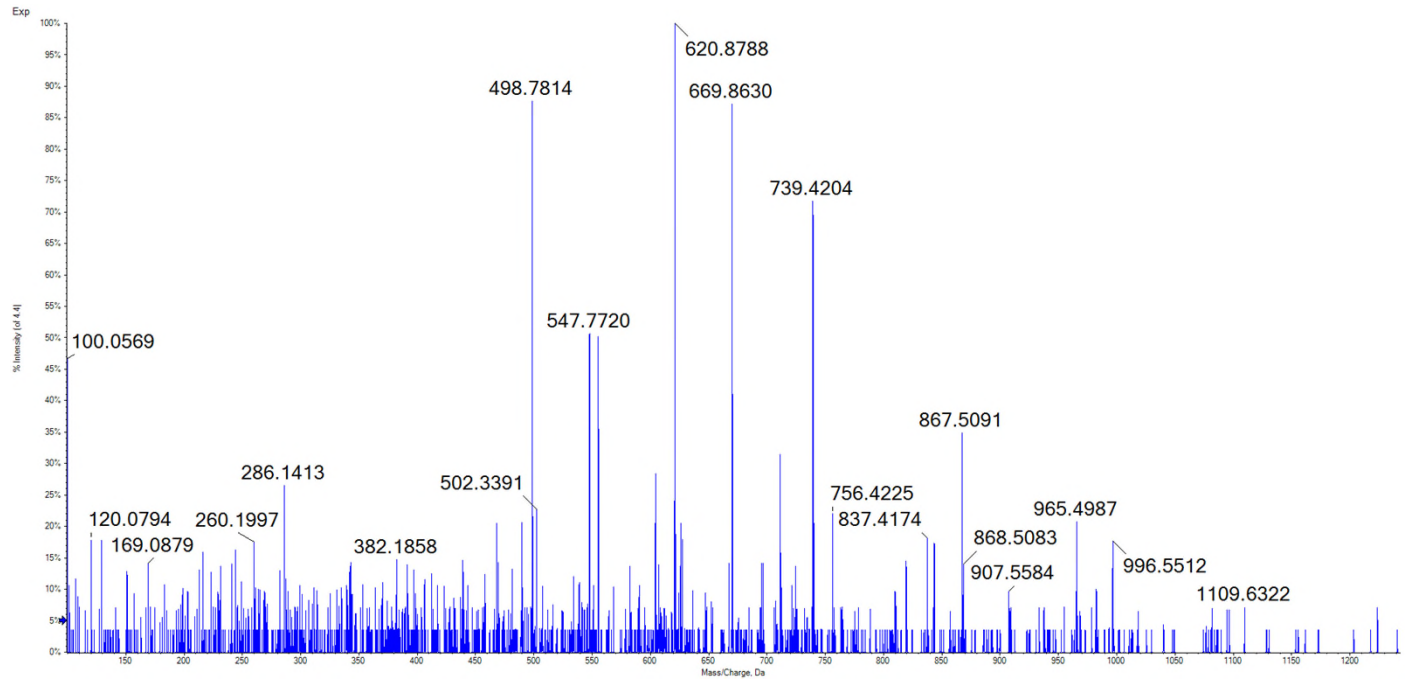
79

REL(pS)GTIKEIL

Synthetic Peptide

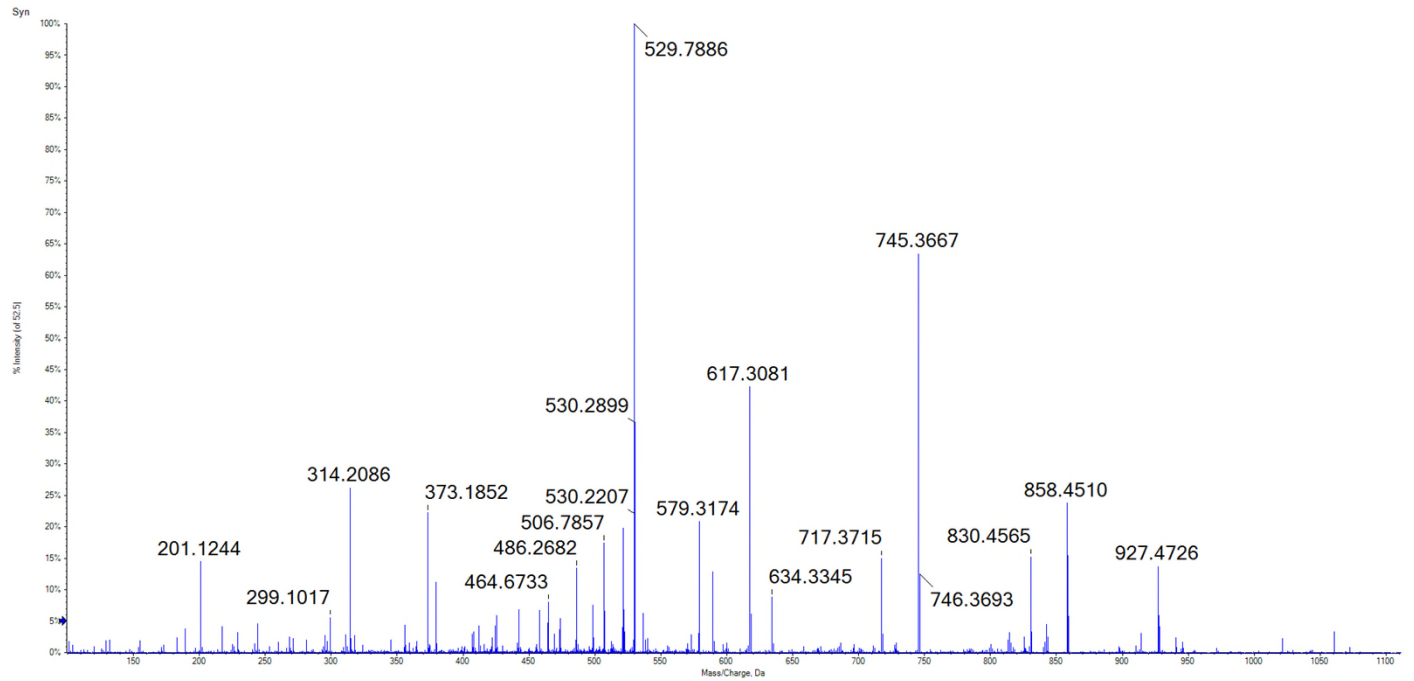


Candidate Spectrum

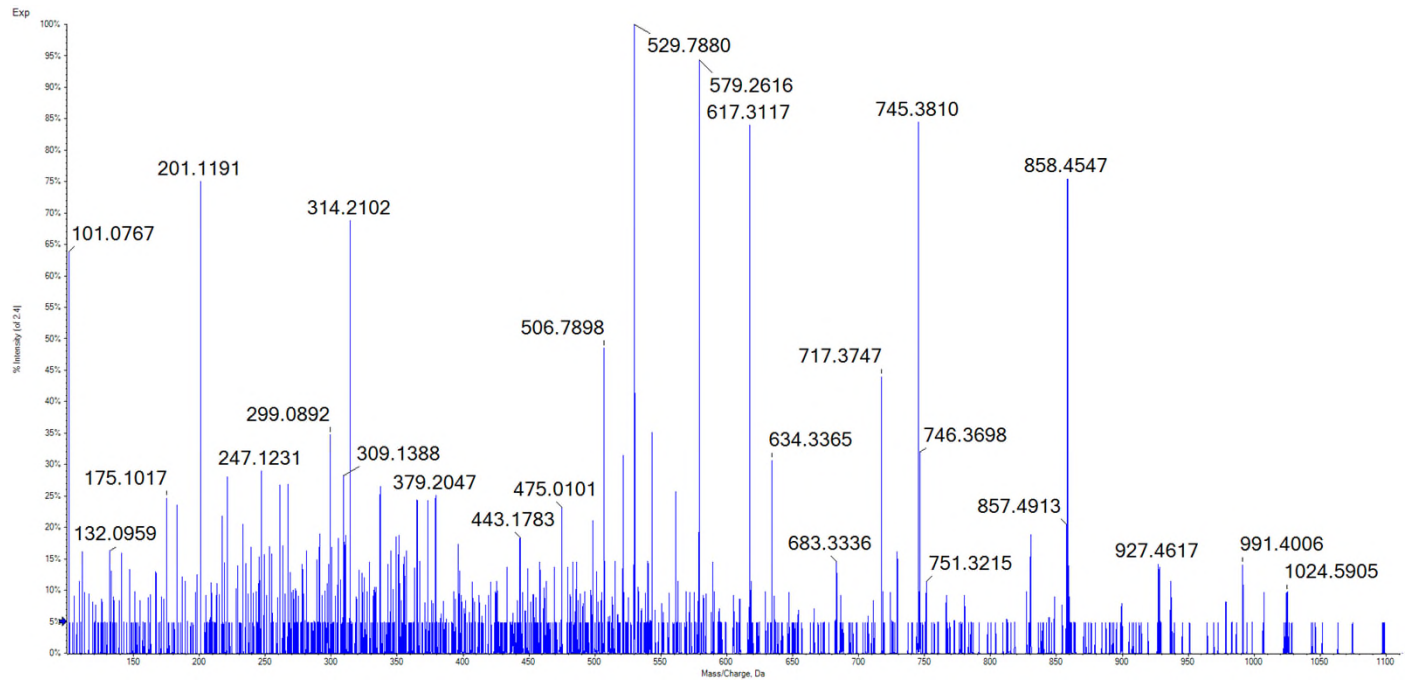


80 SERIMQL(pS)L

Synthetic
Peptide



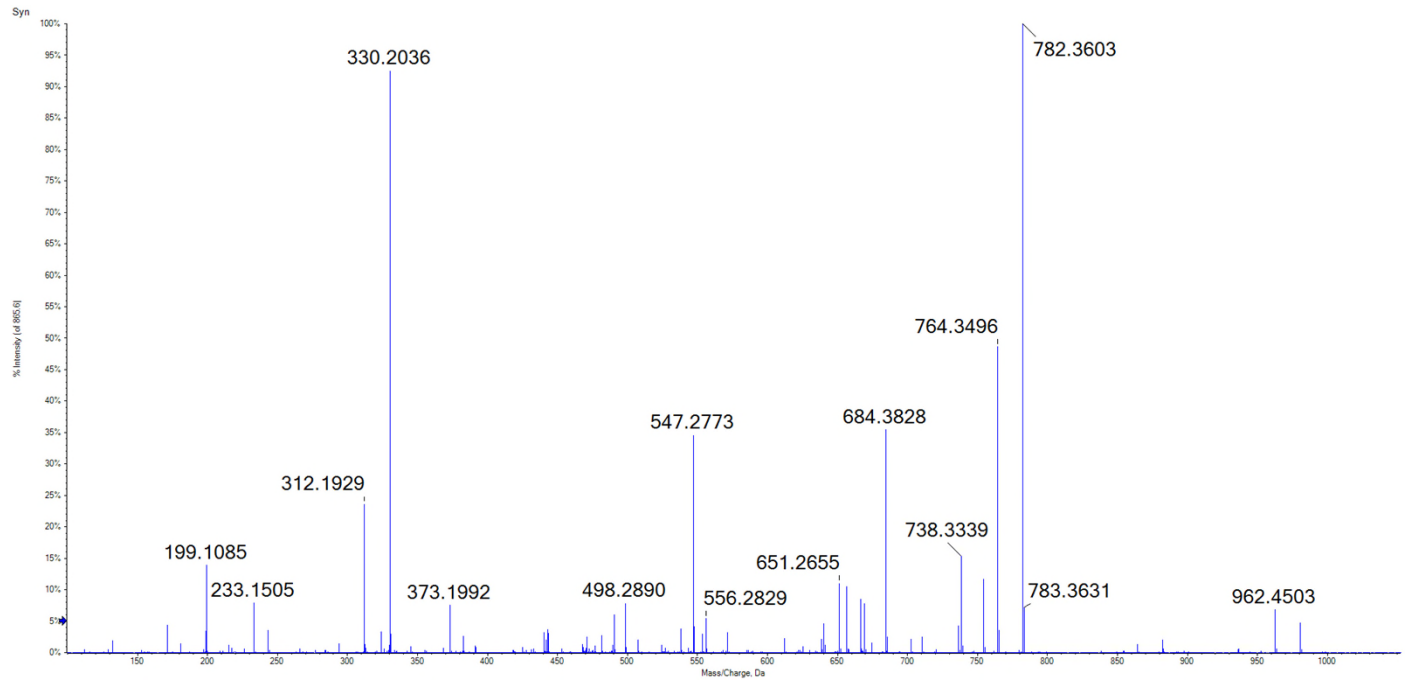
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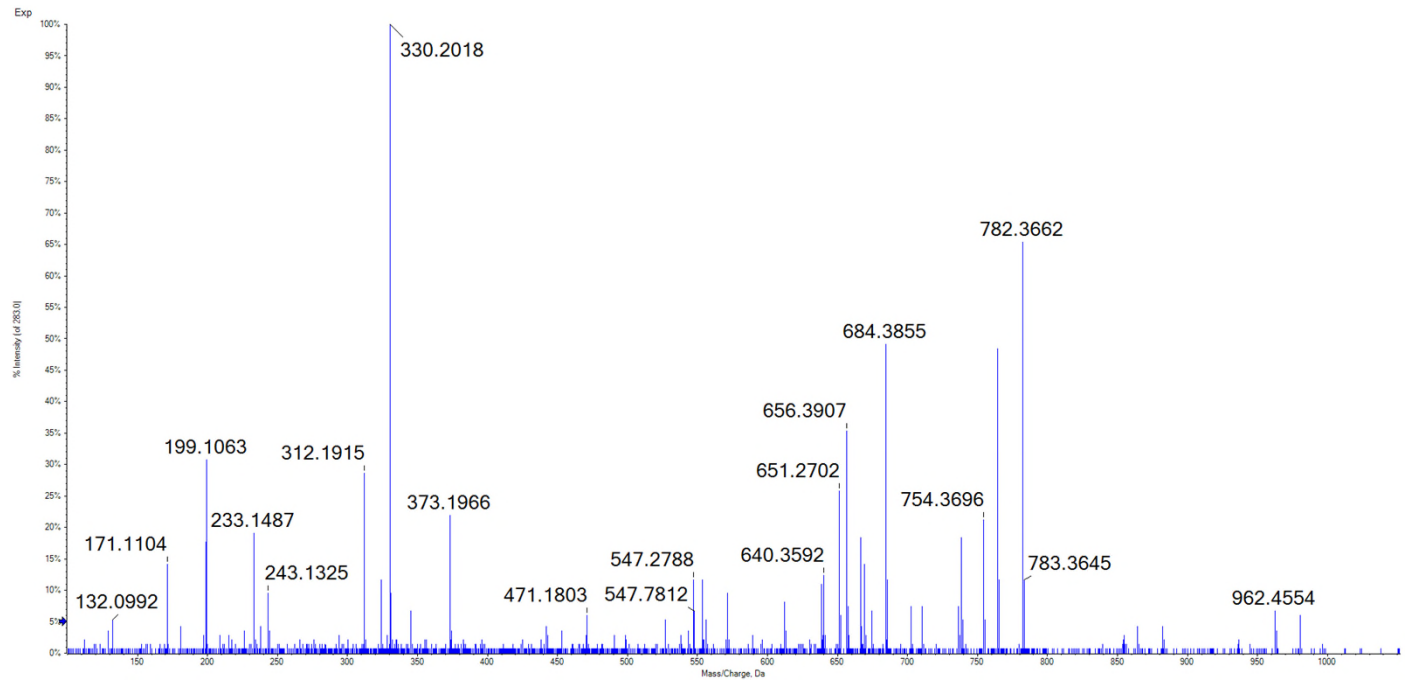
81

R(pS)FPTLPTL

Synthetic
Peptide



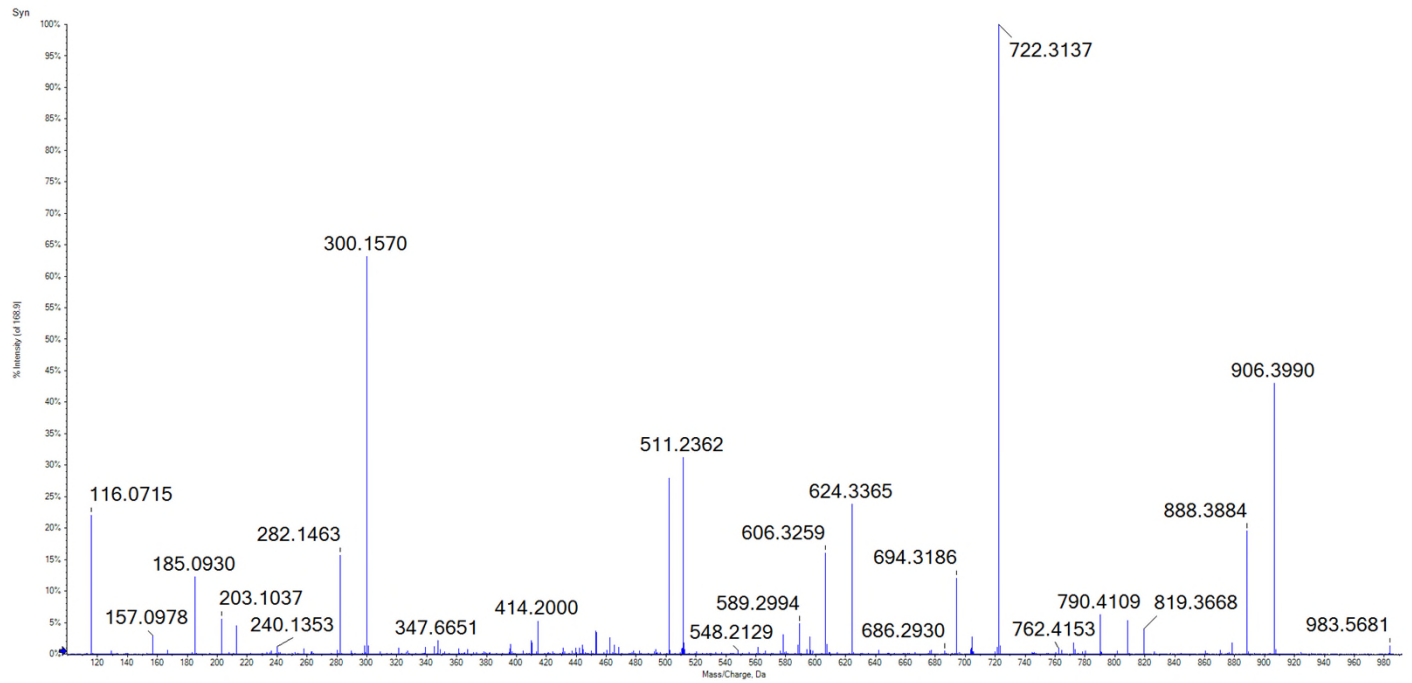
Candidate
Spectrum



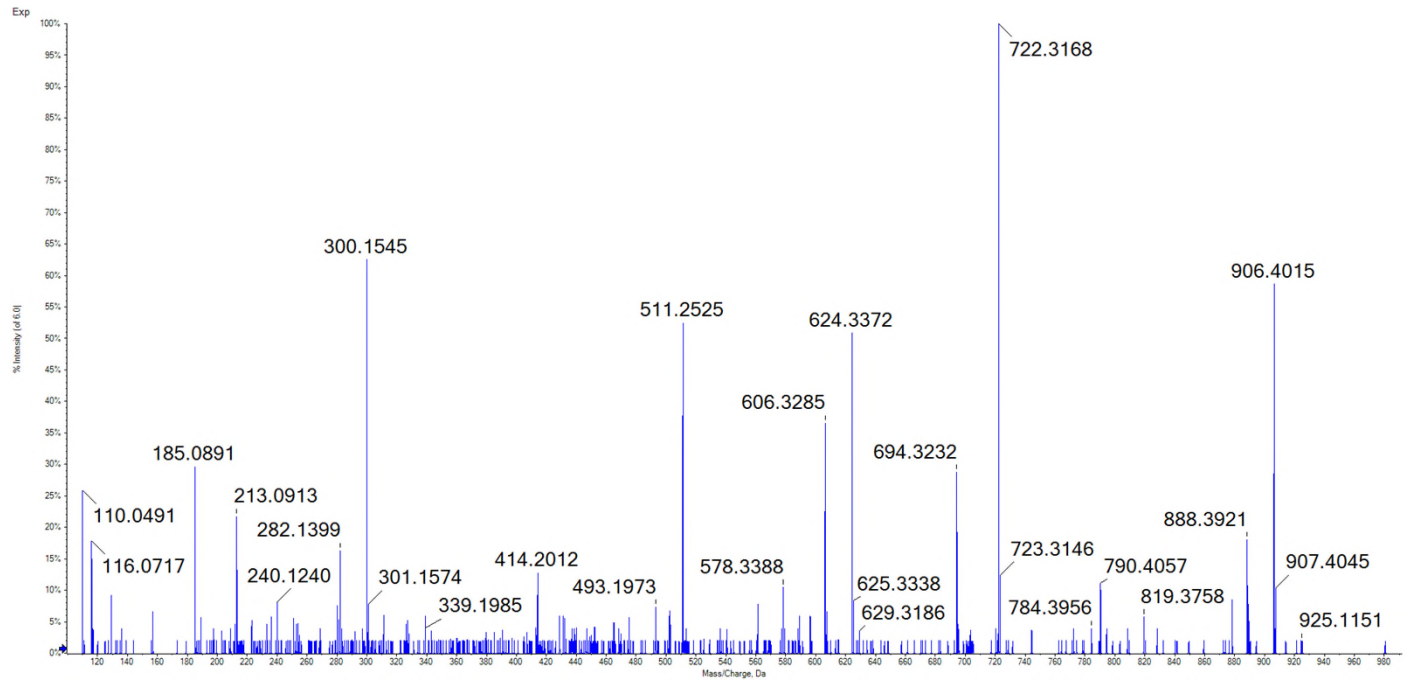
82

KES(pS)PIPSP

Synthetic
Peptide



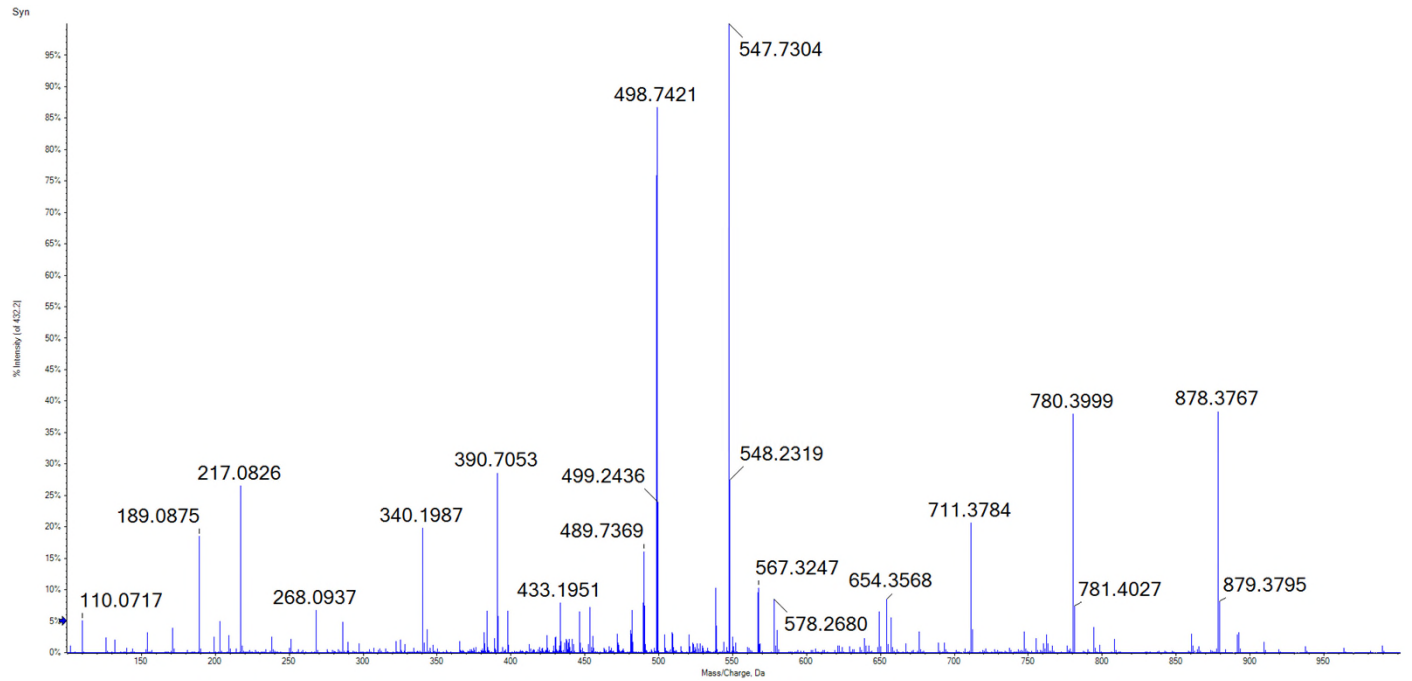
Candidate
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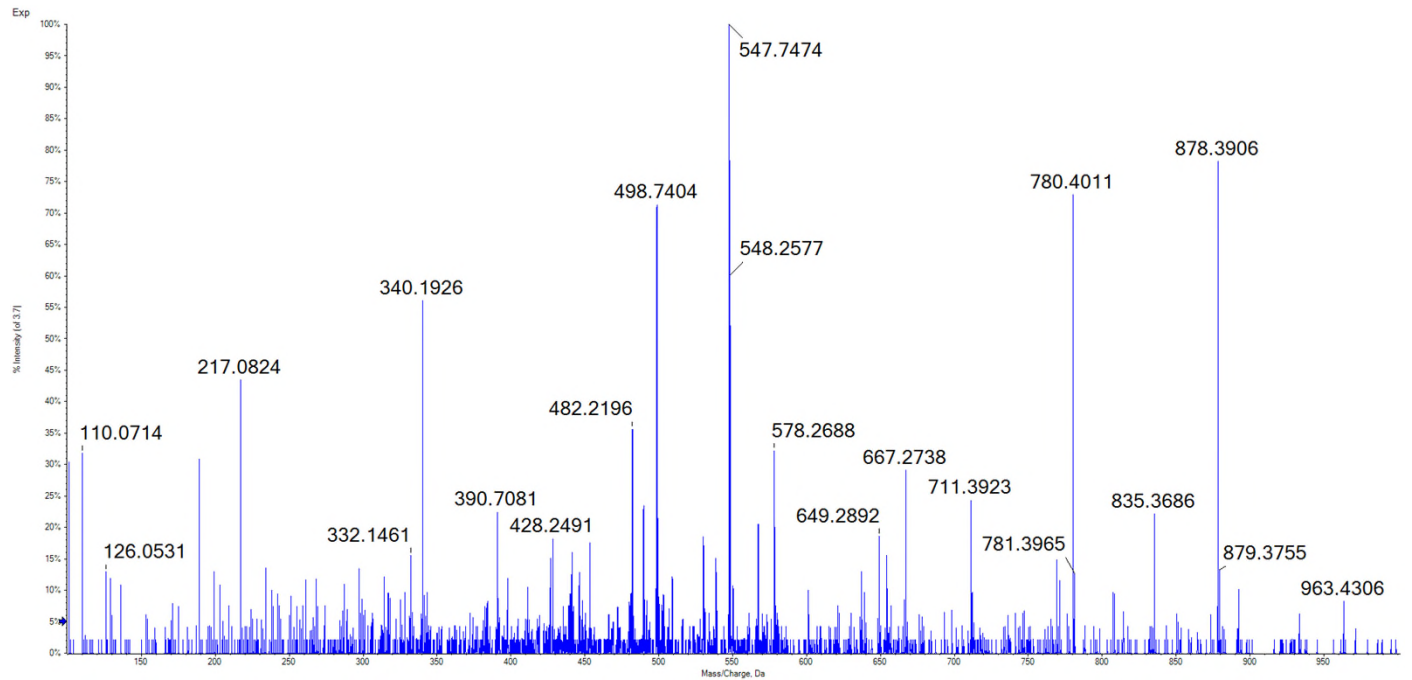
83

SE(pS)GSNLHAL

Synthetic
Peptide



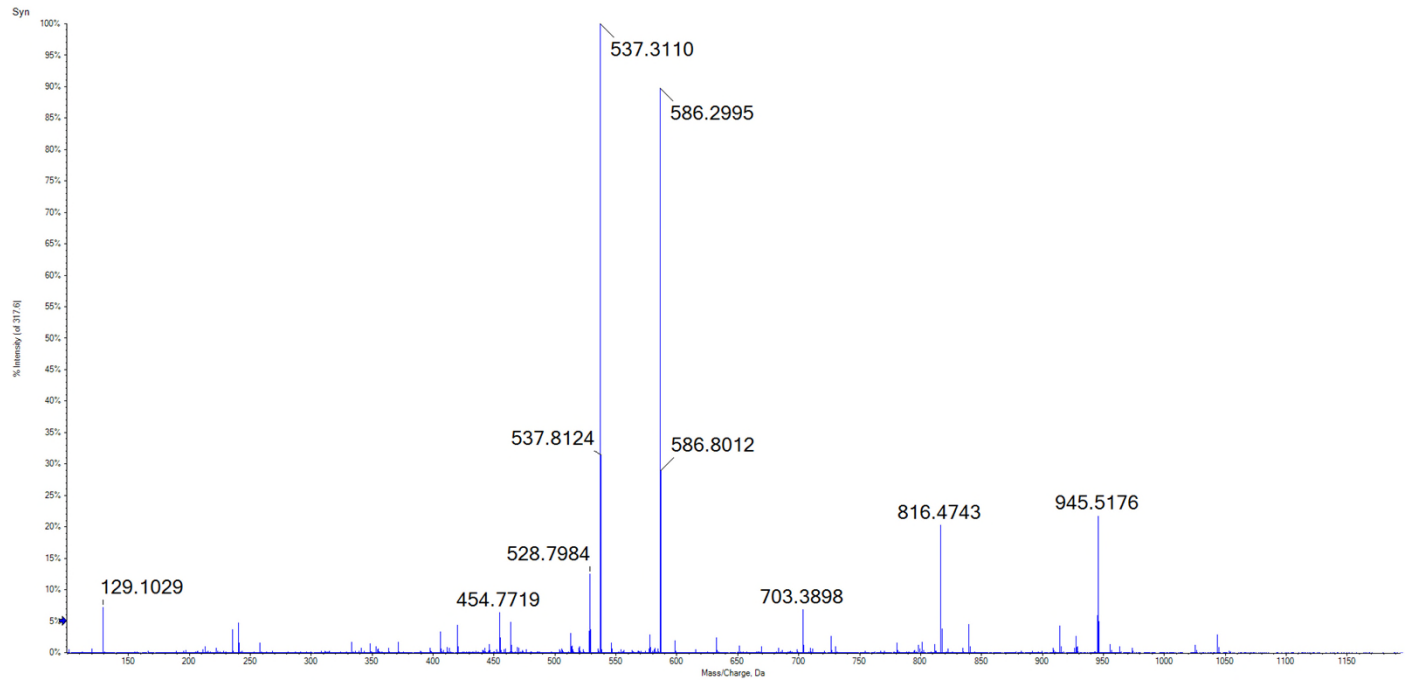
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Spectrum



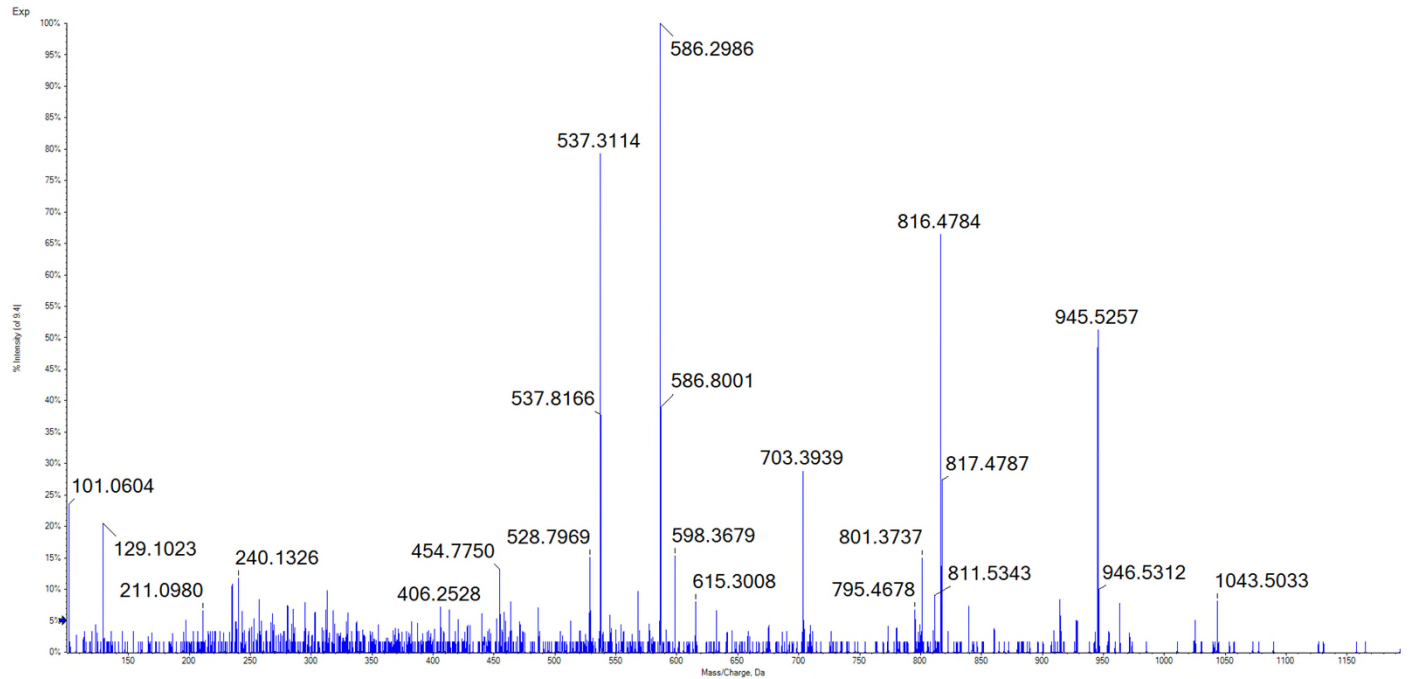
84

KELARQI(pS)F

Synthetic
Peptide



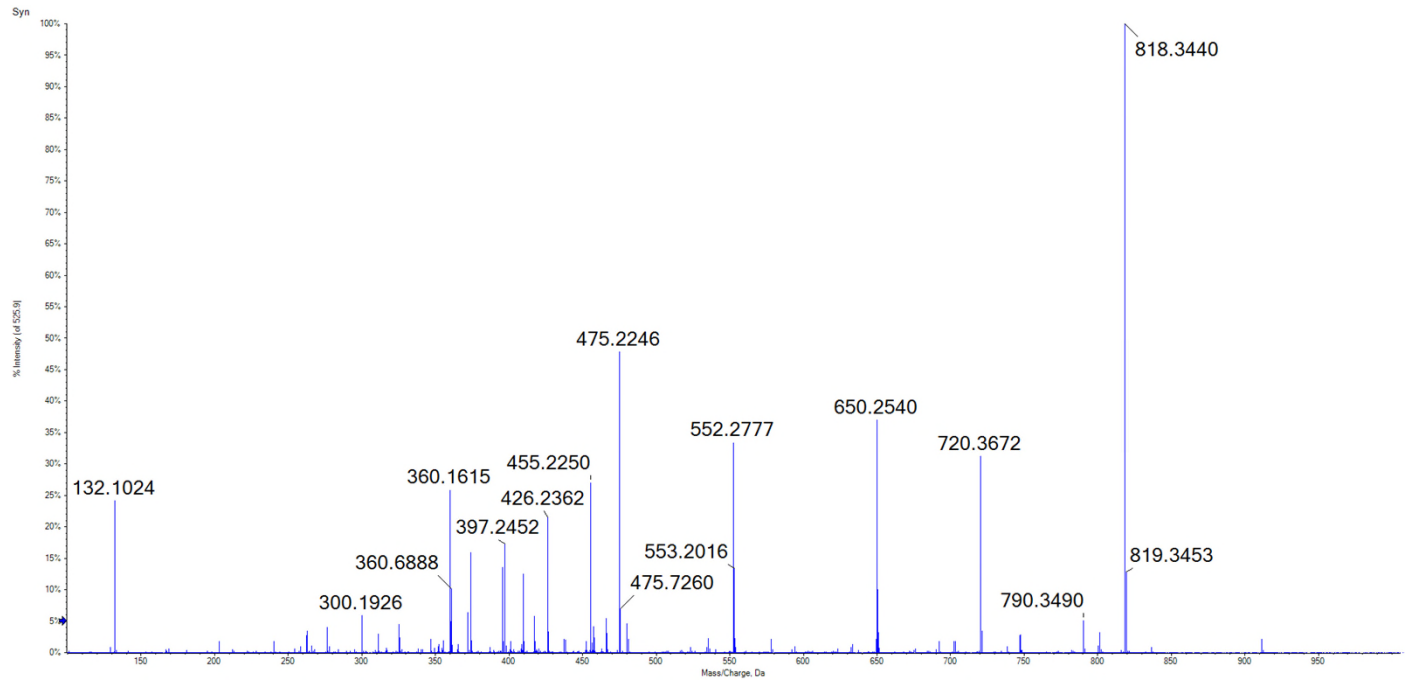
Candidate
Spectrum



85

KEN(pT)PPAL

Synthetic
Peptide



Candidate
Spectrum

