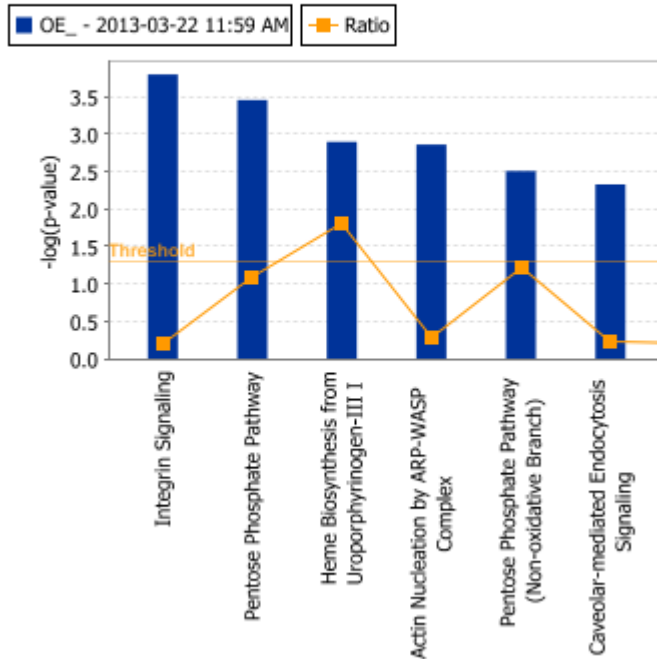


## Supplementary Figure 1.

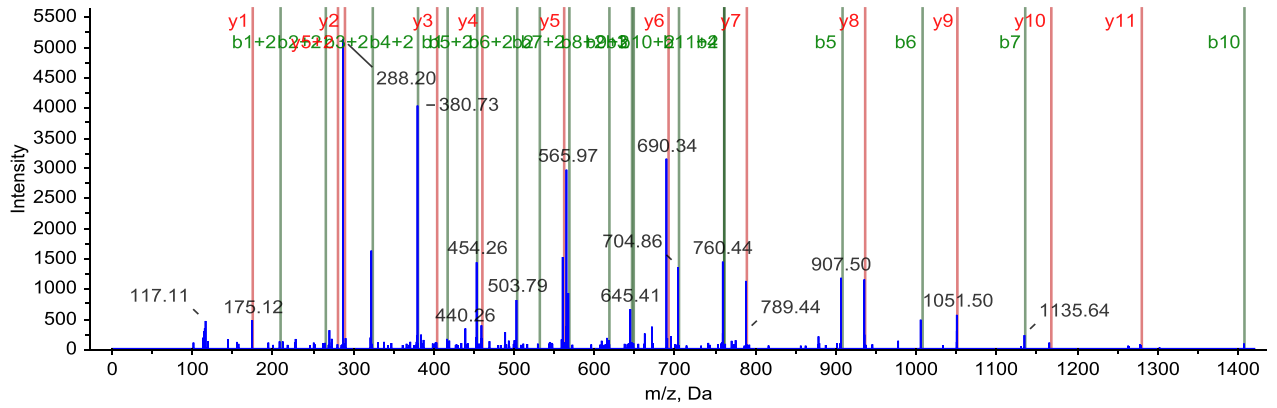
Analysis: OE\_ - 2013-03-22 11:59 AM



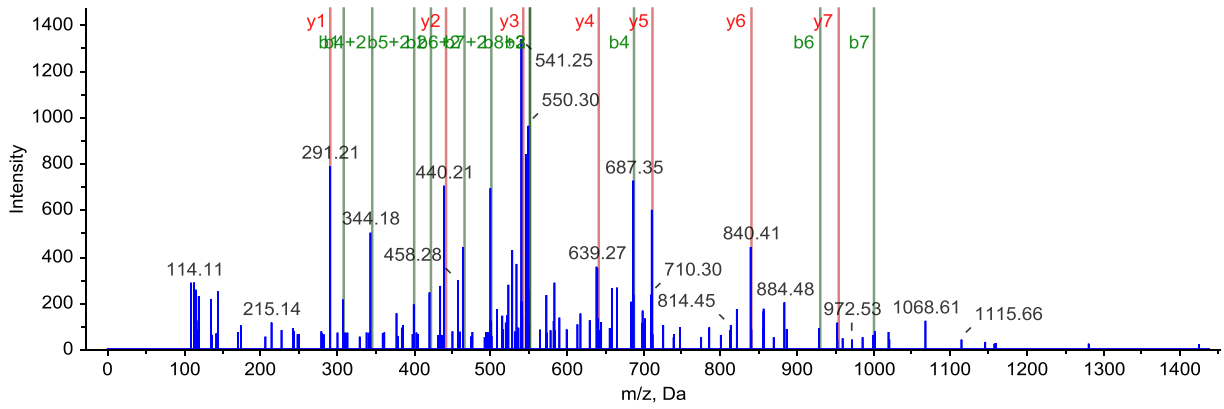
**Supplementary Figure 1.** Original exported image from IPA for the canonical pathways associated with the significantly altered proteins. Integrin signaling, caveolar mediated endocytosis signaling and actin nucleation by ARP-WASP complex were identified among the top 6 hits.



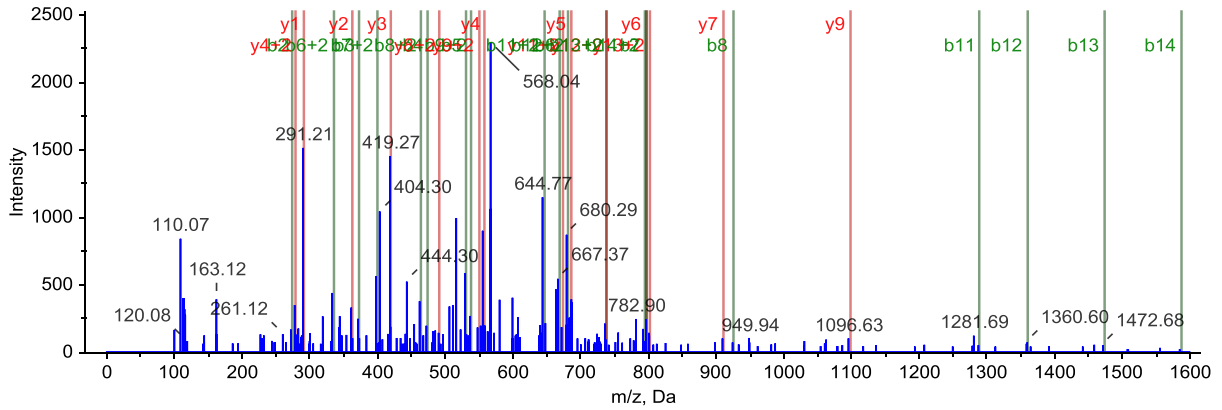
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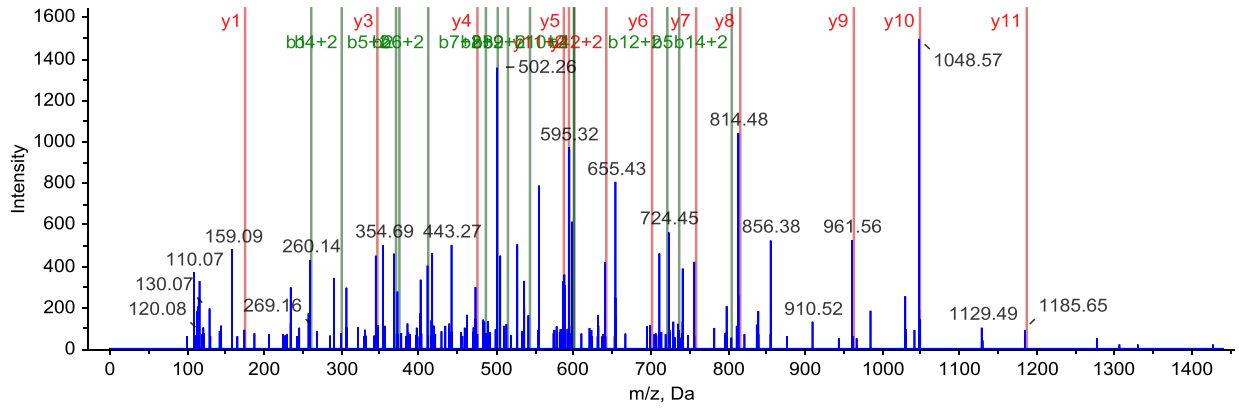
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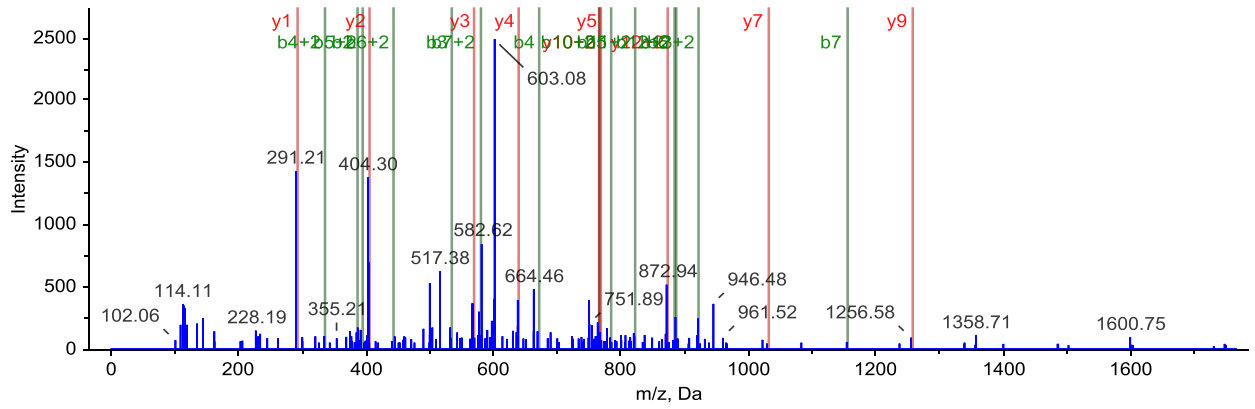
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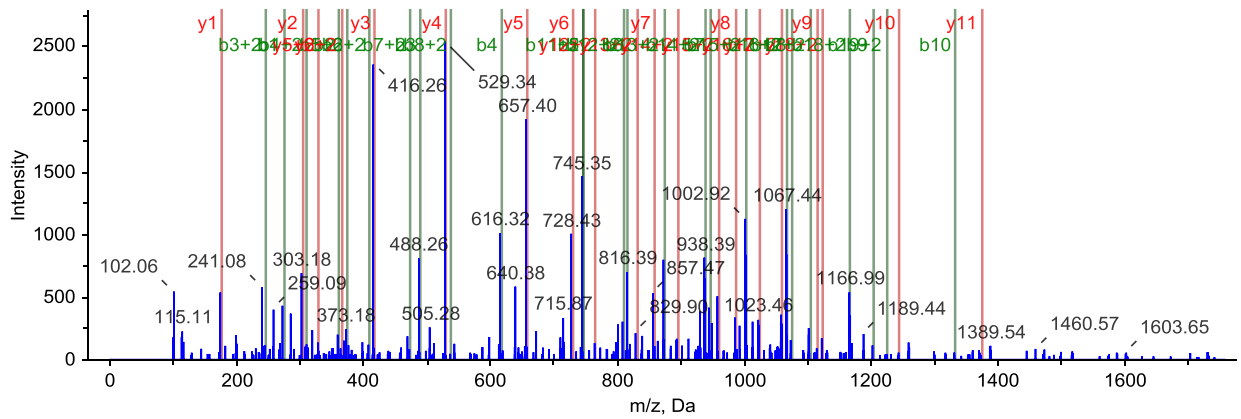
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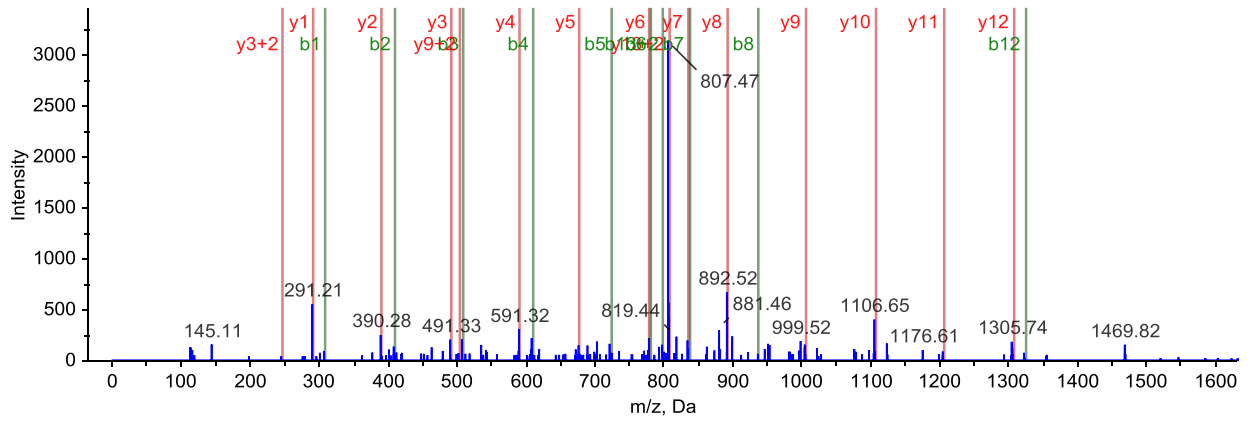
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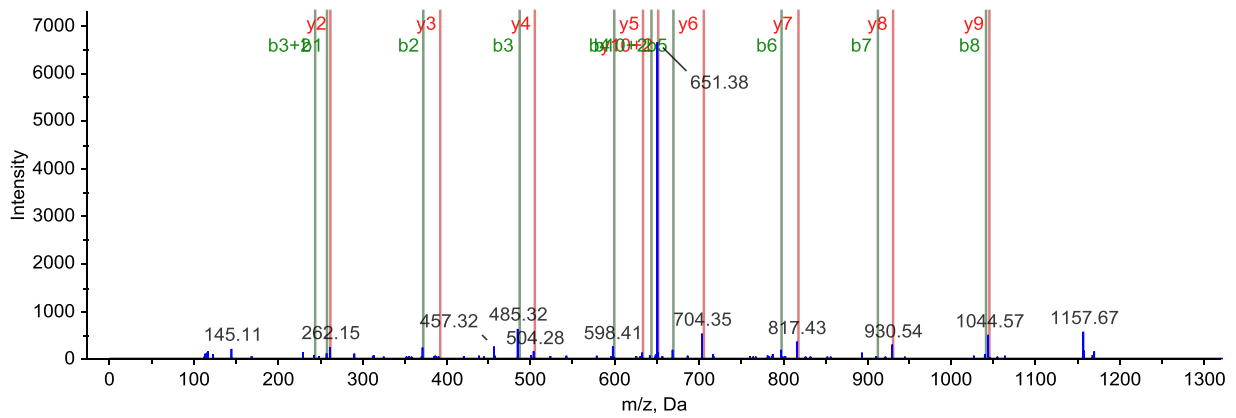
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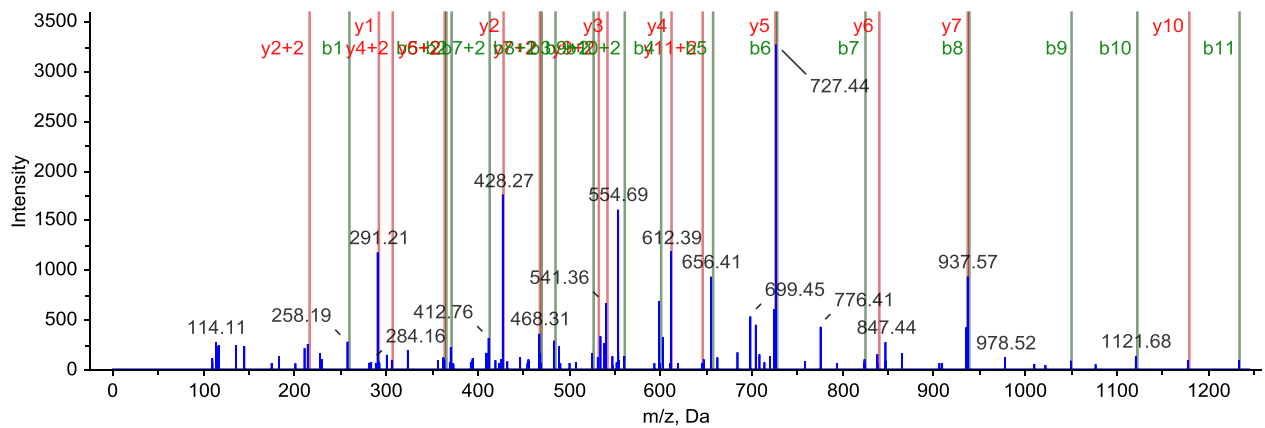
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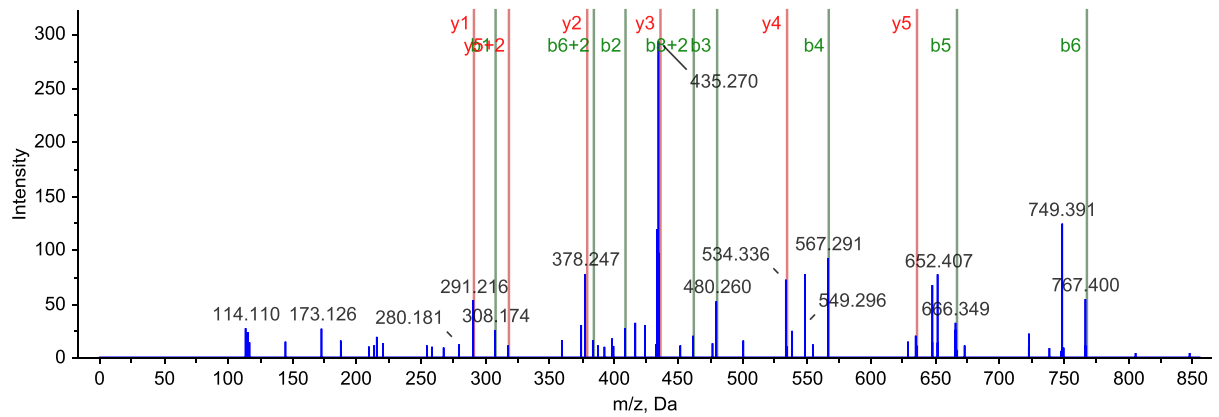
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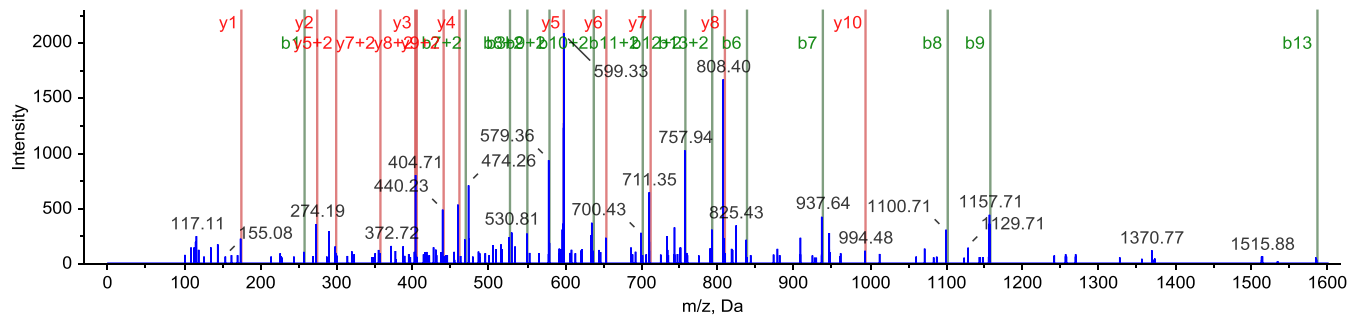
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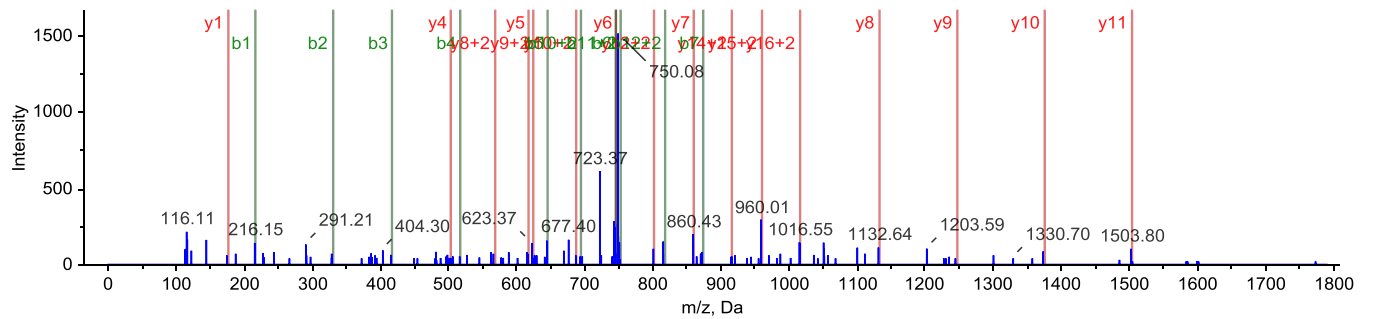
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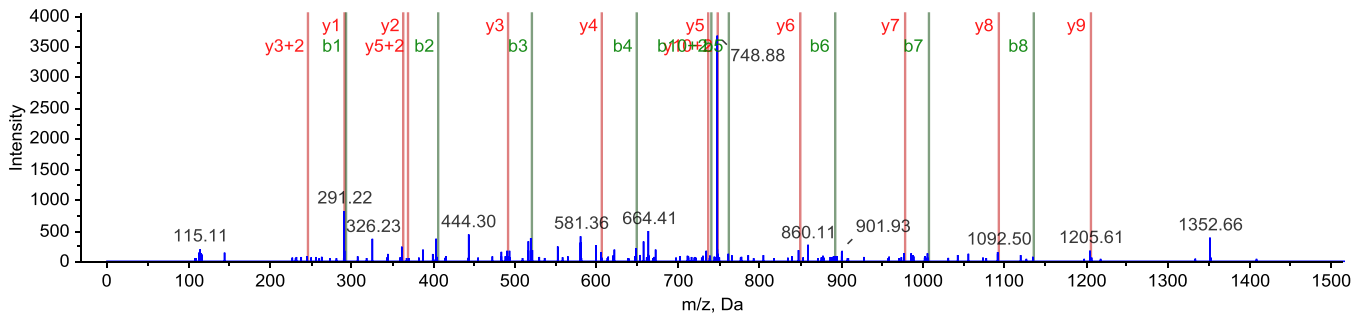
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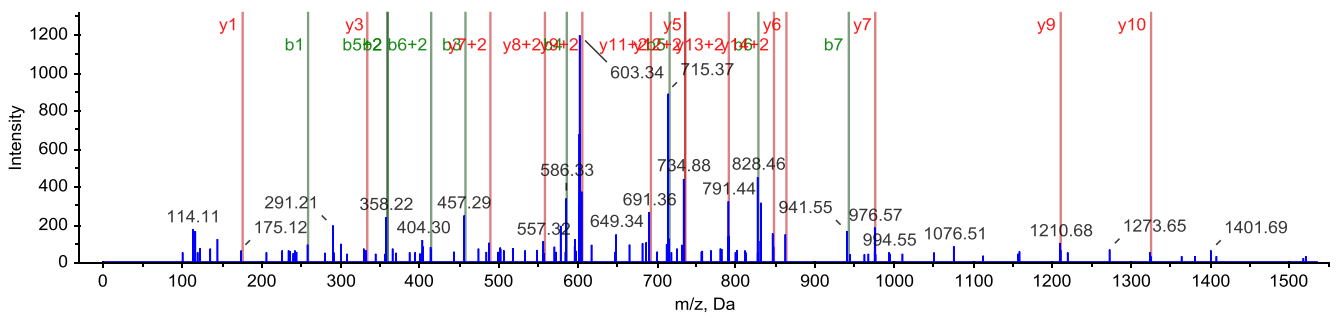
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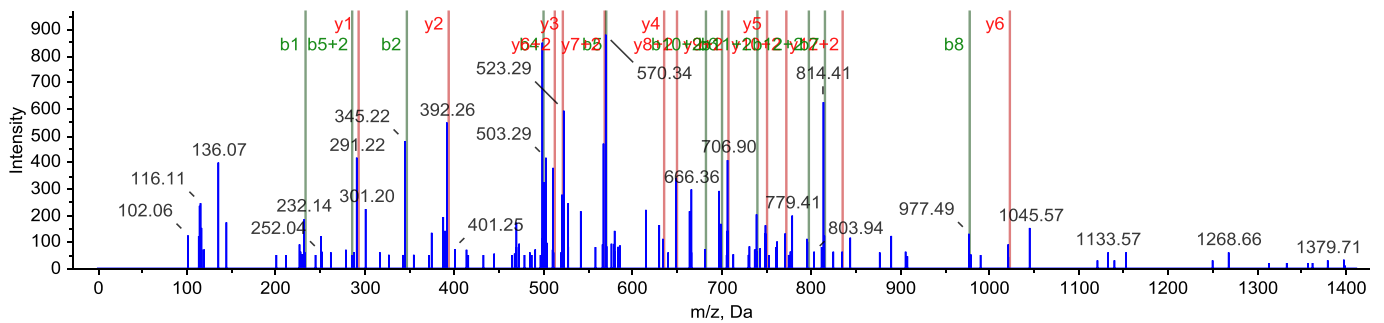
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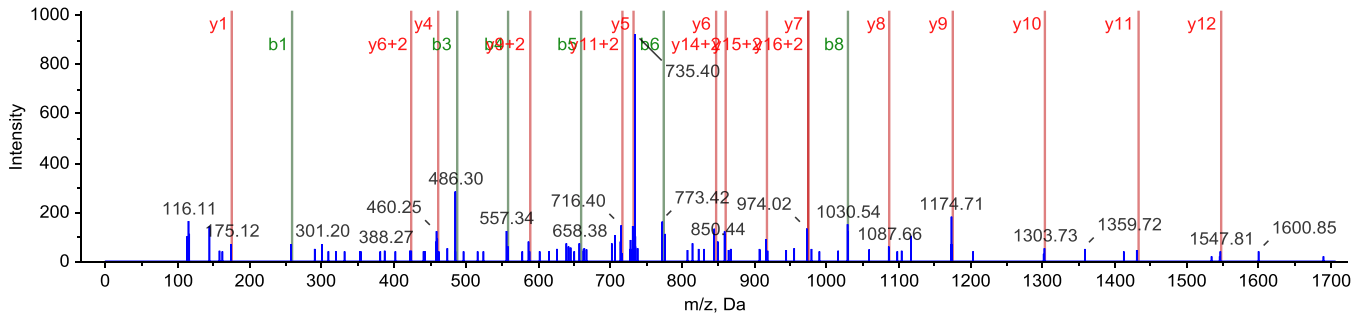
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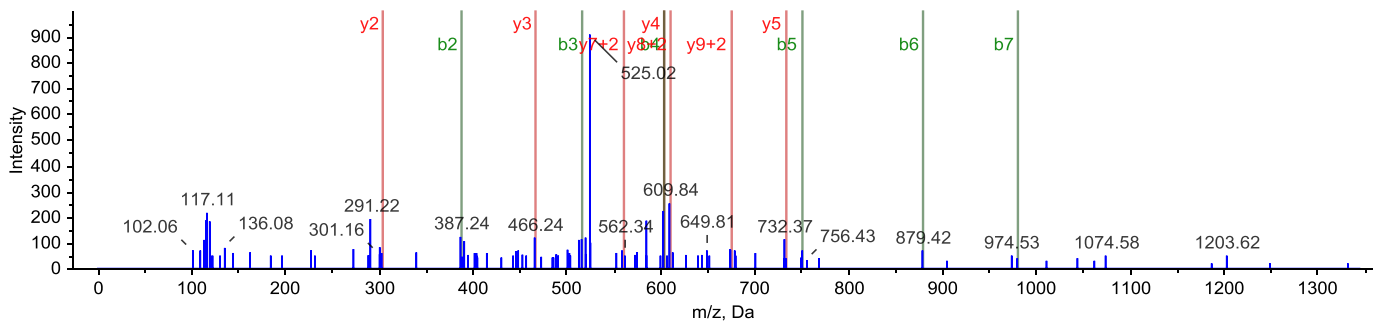
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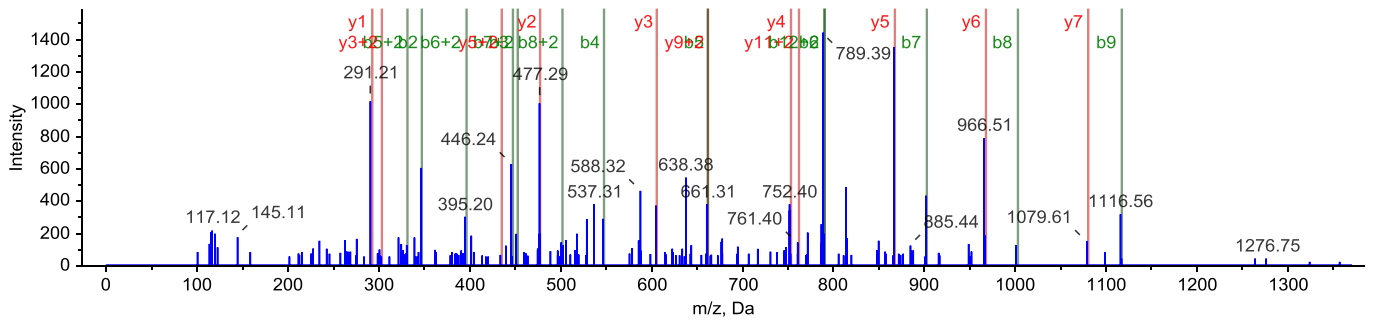
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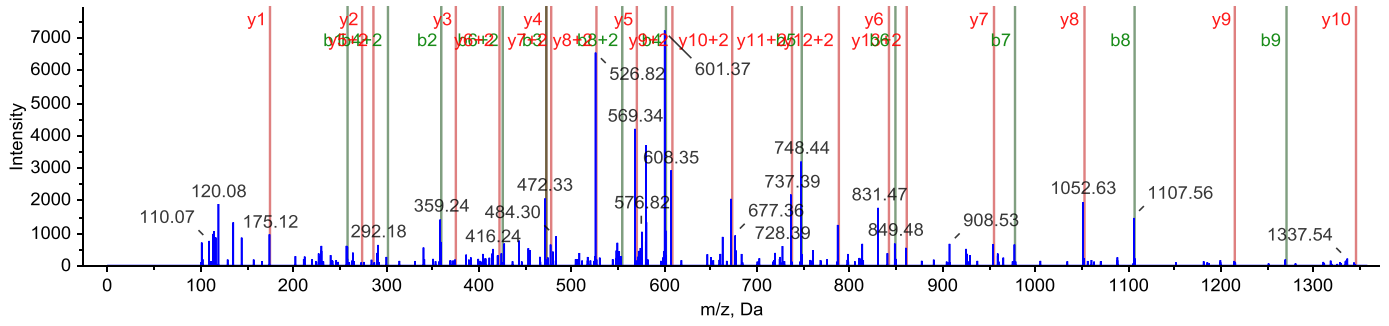


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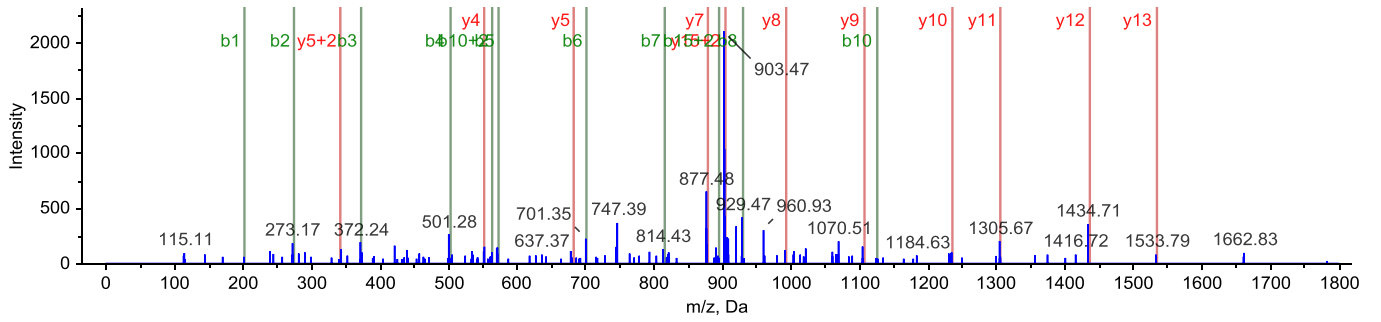




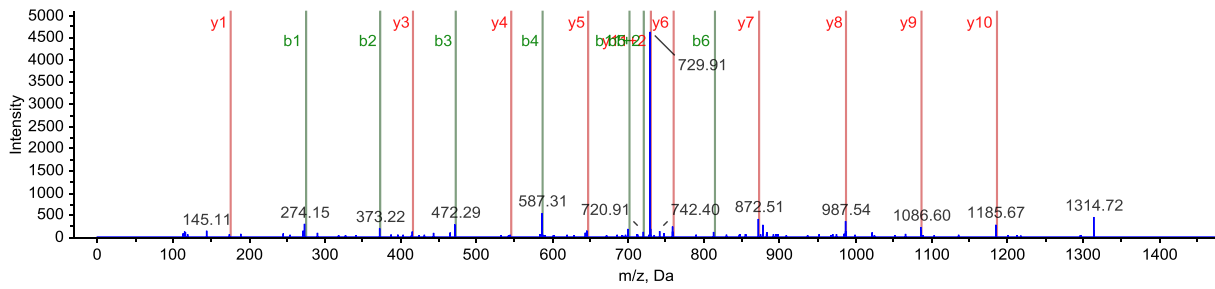
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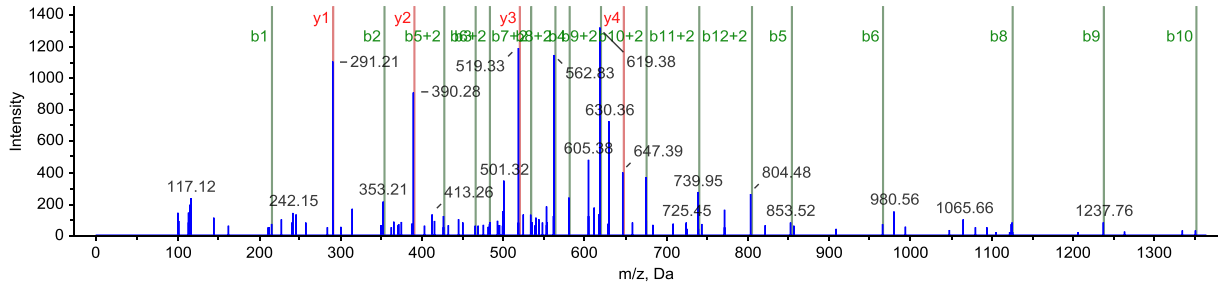
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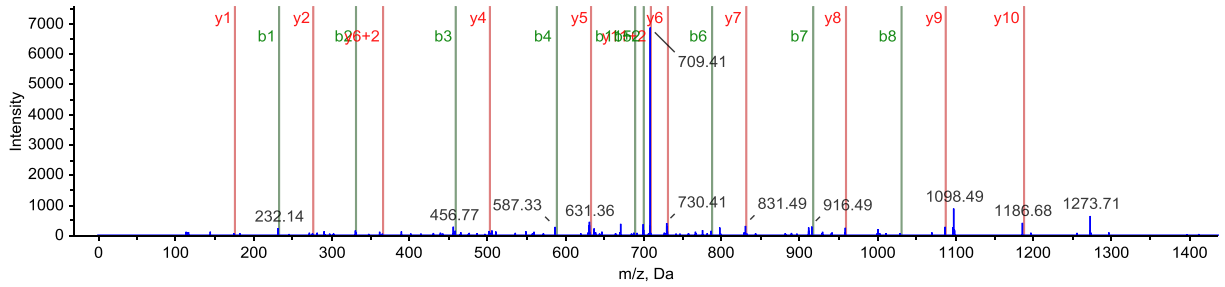
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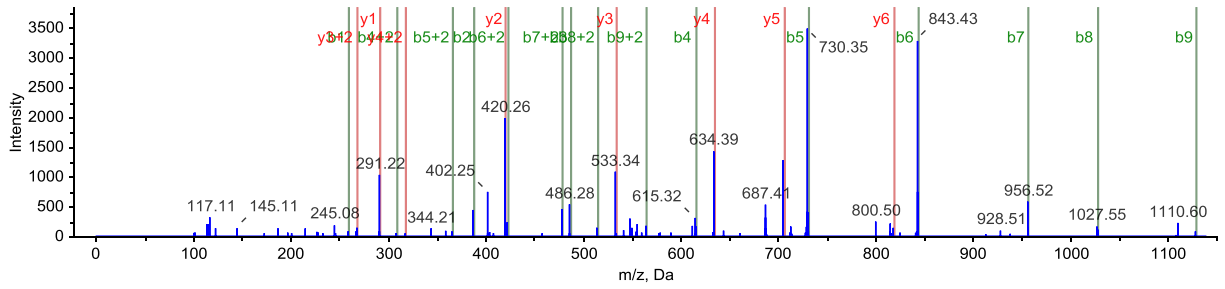
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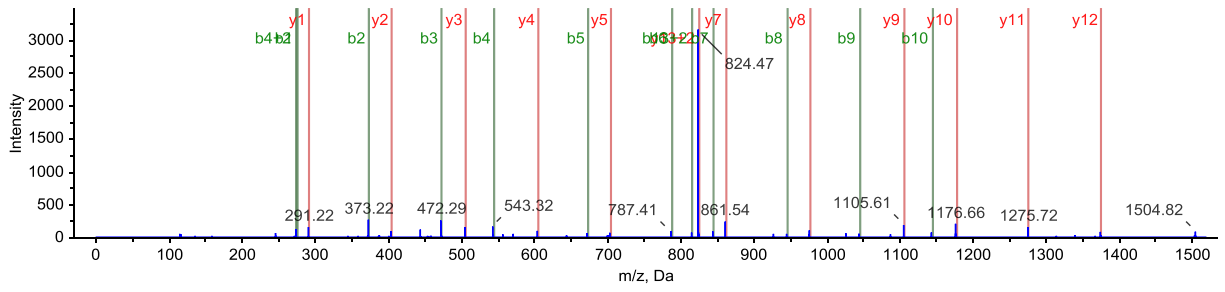
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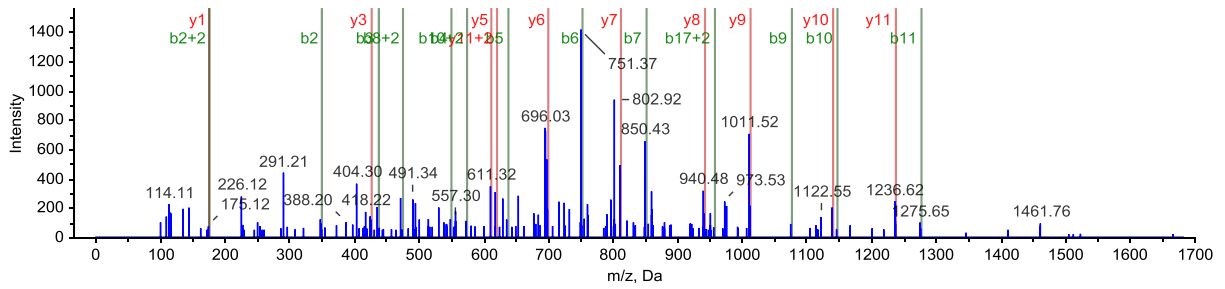
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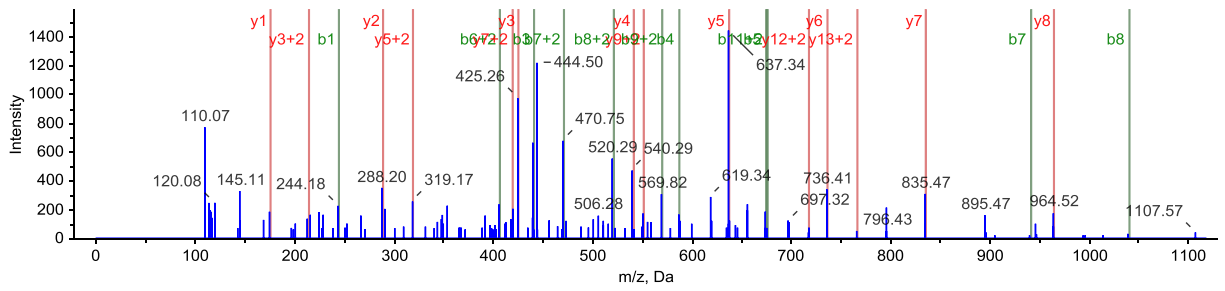
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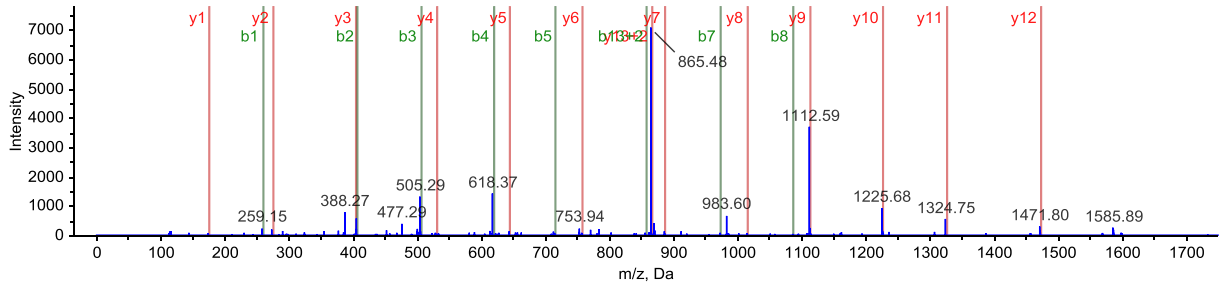
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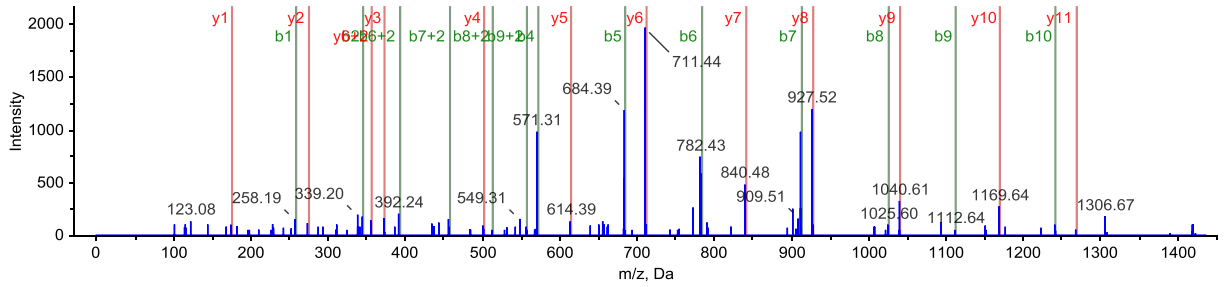
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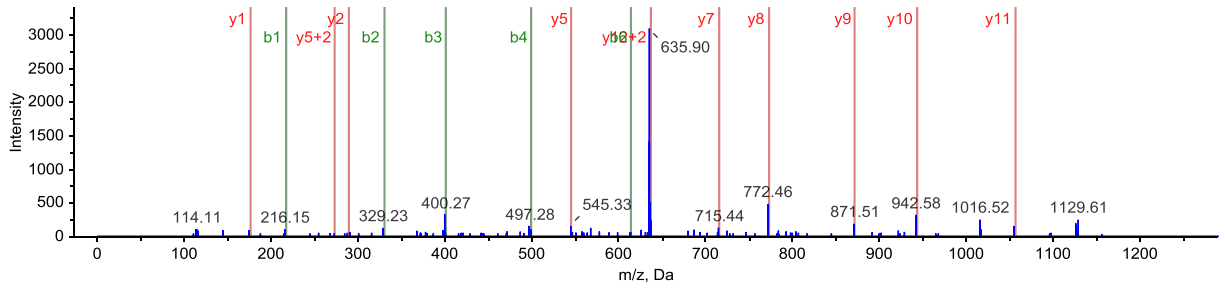
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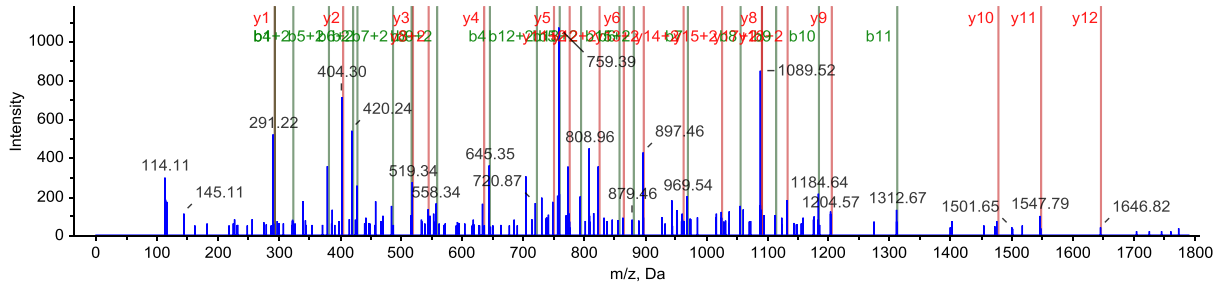
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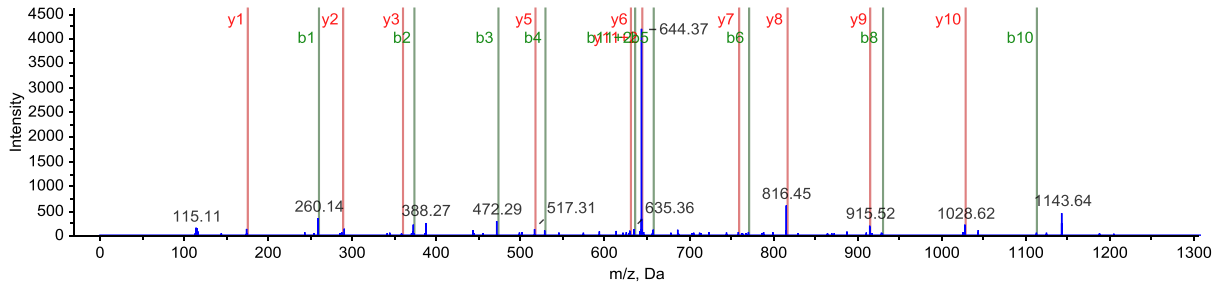
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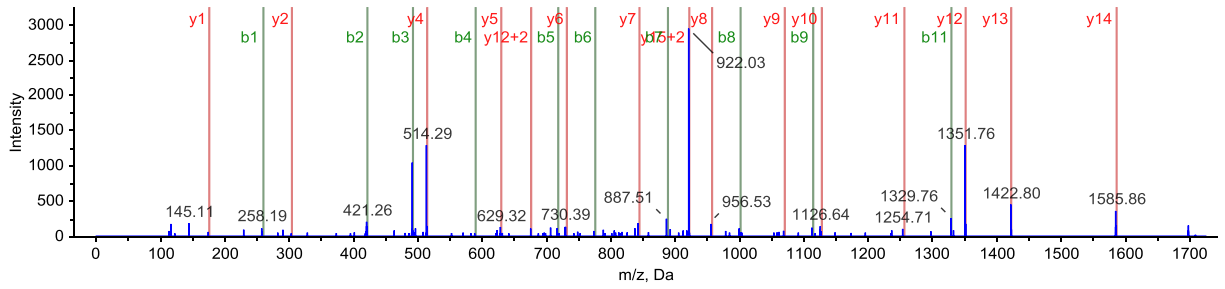
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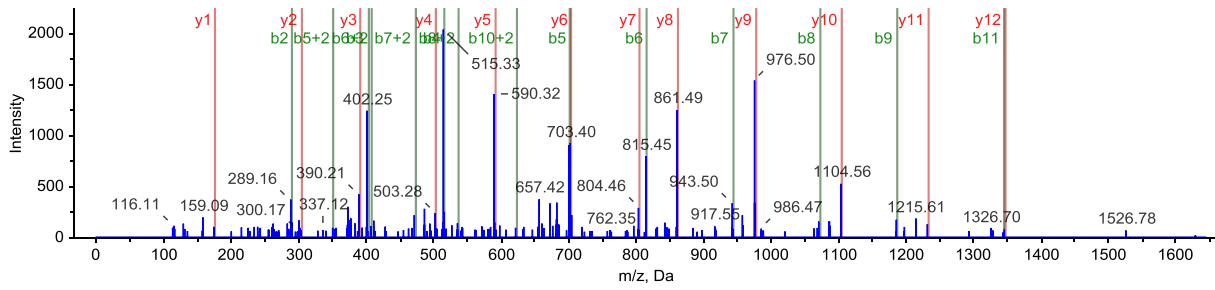
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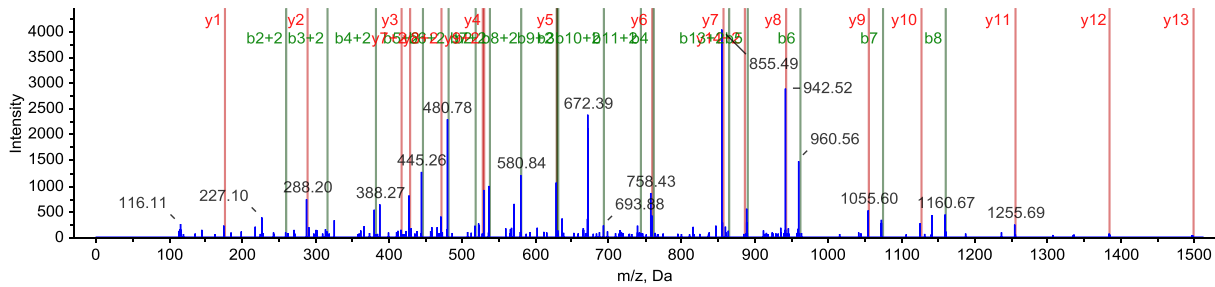
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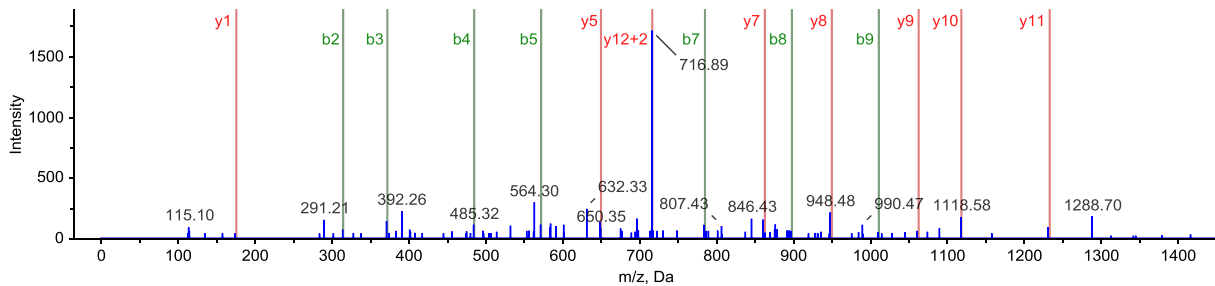
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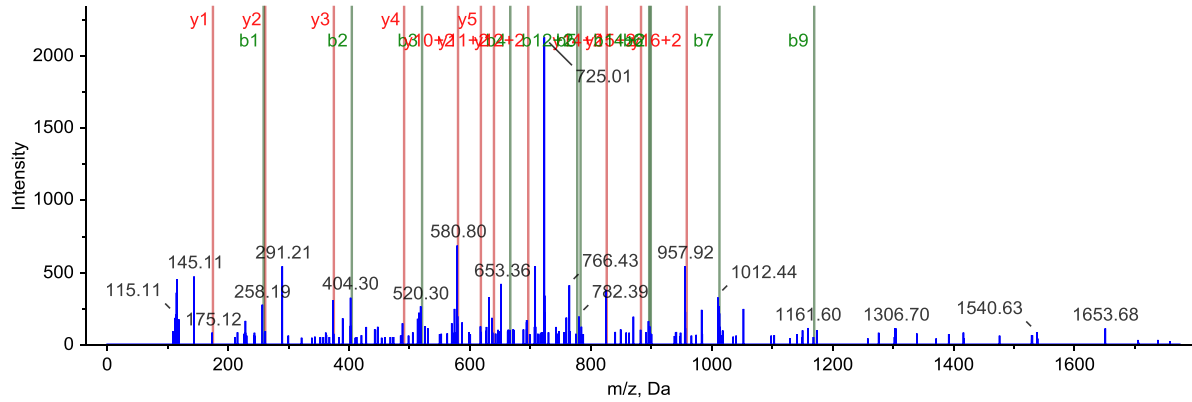


**Supplementary figure 2.** MS/MS spectrum for the single peptide matched proteins those are significantly altered: 1. TANK 31 kDa protein (matched peptide GLCRDEEDTSFESLSK); 2. RBCK1 38 kDa protein (matched peptide VPLSVQLKPEVSPTQDIR); 3. MYO1B Uncharacterized protein (matched peptide SLPIYSPEKVEEYR); 4. SCARB2 Lysosome membrane protein 2 (matched peptide KLDDFVETGDIR); 5. AREGB Amphiregulin (matched peptide YIEHLEAVTCK); 6. Isoform 4 of Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit A (matched peptide GAVTGHEECVDALLQHGA); 7. TSC22 domain family protein 4 (matched peptide DLEPHSFGGLLEGIR); 8. GBAS Protein NipSnap homolog 2 (matched peptide LQFHNVKPECLEAYNK); 9. UTP3 Something about silencing protein 10

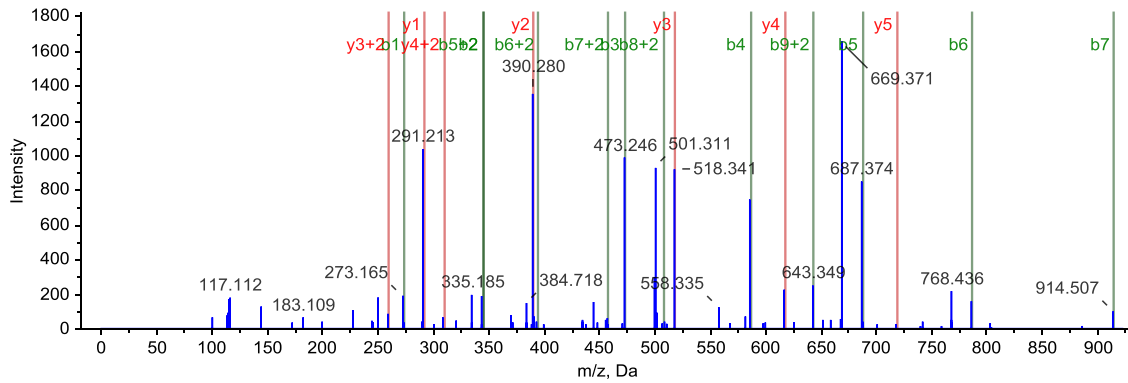
(matched peptide QSQQEAEEREEEEEAQIIQR); 10. Uncharacterized protein C18orf19 (matched peptide YTVTLGGTSVTVK); 11. Isoform 2 of Surfeit locus protein 1 (matched peptide LNLIAELESR); 12. Isoform 1 of Haloacid dehalogenase-like hydrolase domain-containing protein 2 (matched peptide LLLDGAPLIAIHK); 13. RHOF cDNA FLJ75043, highly similar to Homo sapiens ras homolog gene family, member F (matched peptide YTASVTVGSK). 14. ACAD10 acyl-CoA dehydrogenase family member 10 isoform a (matched peptide IIRPLTVYGLEDA PGGHGEVR); 15. C10orf118 C10orf118 protein Fragment (matched peptide ALSTQVEELKDELVTQR); 16. CCDC56 Coiled-coil domain-containing protein 56 (matched peptide FLDELEDEAK); 17. TESC Isoform 1 of Tescalcin (matched peptide NVVEELLSGNPHIEKESAR); 18. CRTAP Uncharacterized protein (matched peptide SLPGAEDYIKDLETK); 19. KIAA0319L Uncharacterized protein (matched peptide ILDATDQESLELKPTSR); 20. TMCC1 cDNA FLJ55826, highly similar to Transmembrane and coiled-coil domains protein1 (matched peptide LEESFETLKEHYQR); 21. COMMD6 Isoform 2 of COMM domain-containing protein 6 (matched peptide SDVTNQLVDFQWK); 22. UBE2A Ubiquitin-conjugating enzyme E2 A (matched peptide LTIEFTEEYPNKPPTVR); 23. POP7 Uncharacterized protein (matched peptide GAVEAELDPVEYTLR); 24. ULBP2 cDNA FLJ56582, highly similar to NKG2D ligand 2 (matched peptide EVVDILTEQLR); 25. KIF1C Kinesin-like protein KIF1C (matched peptide AHIDKLTGILQEVK); 26. MED20 Mediator of RNA polymerase II transcription subunit 20 (matched peptide SVQQTVELLTR); 27. NCSTN cDNA FLJ60331, highly similar to Nicastrin (matched peptide NQVEDLLATLEK); 28. KLHDC4 Isoform 2 of Kelch domain-containing protein 4 (matched peptide EVVAEDGTVVVTIK); 29. GPC1 Glypican-1 (matched peptide GFSLSDVPQAEISGEHLR); 30. MED8 Isoform 1 of Mediator of RNA polymerase II transcription subunit 8 (matched peptide VPVFSHEVVPDHLR); 31. C20orf20 MRG-binding protein (matched peptide NFVLP EEIIQEVR); 32. P4HTM Isoform 3 of Transmembrane prolyl 4-hydroxylase (matched peptide LSPEIVELSEPLQVVR); 33. ARPC5L Actin-related protein 2/3 complex subunit 5-like protein (matched peptide ALAVGGLGSIIR); 34. TADA1 Transcriptional adapter 1 (matched peptide FQPQNPLSGAQQFVAKDPQDDDDLK); 35. FUCA1 Tissue alpha-L-fucosidase (matched peptide DLVGELGTALR); 36. GOLGA7 Golgin subfamily A member 7 isoform b (matched peptide IYAPQGLLLTDPIER); 37. C19orf63 Isoform 3 of UPF0510 protein INM02 (matched peptide GSLLWNQQDGTL SLSQR); 38. BOLA1 Bola-like protein 1 (matched peptide TKLEEALSPEVLELR); 39. CTPS2 CTP synthase 2 (matched peptide GLGLSPDLIVCR).

**Supplementary figure 3.** MS/MS spectrum for the single peptide matched proteins those are significantly altered in the KD dataset

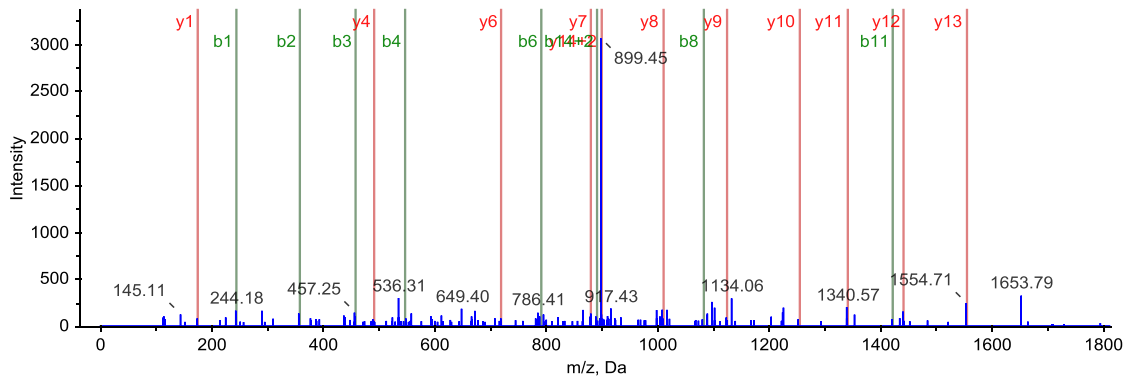
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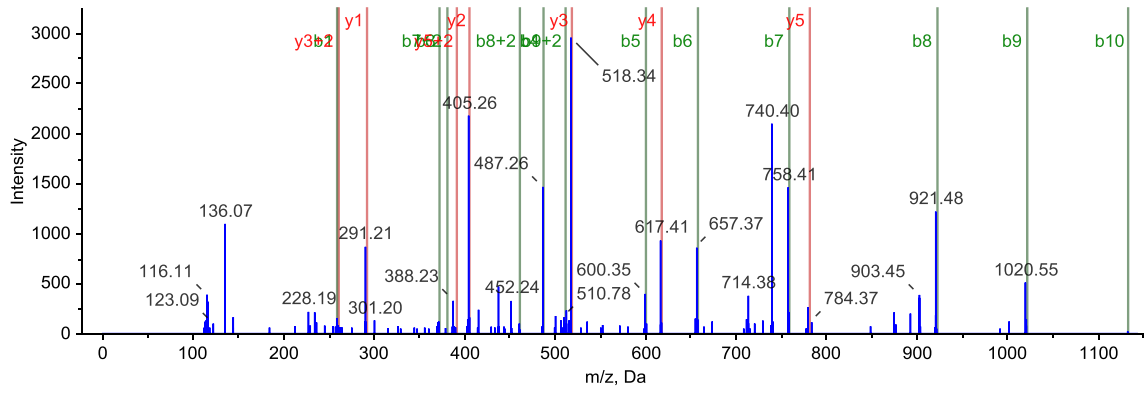


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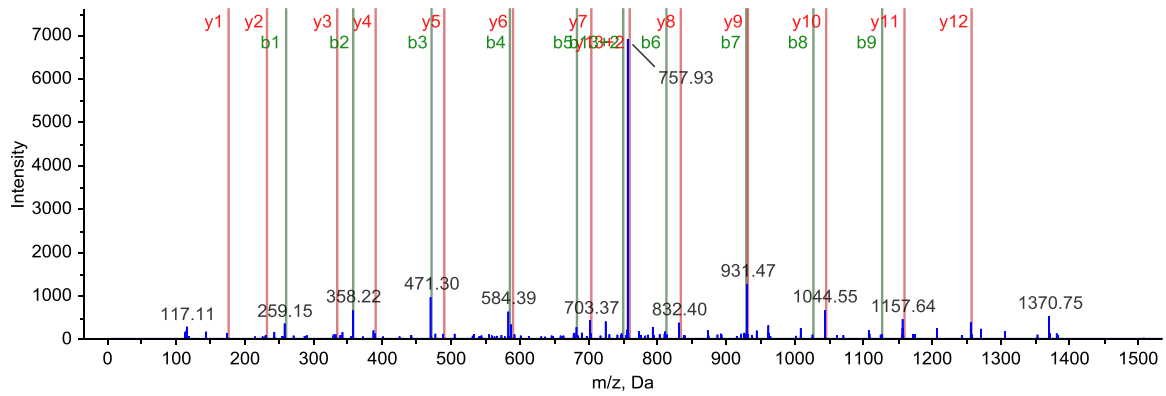




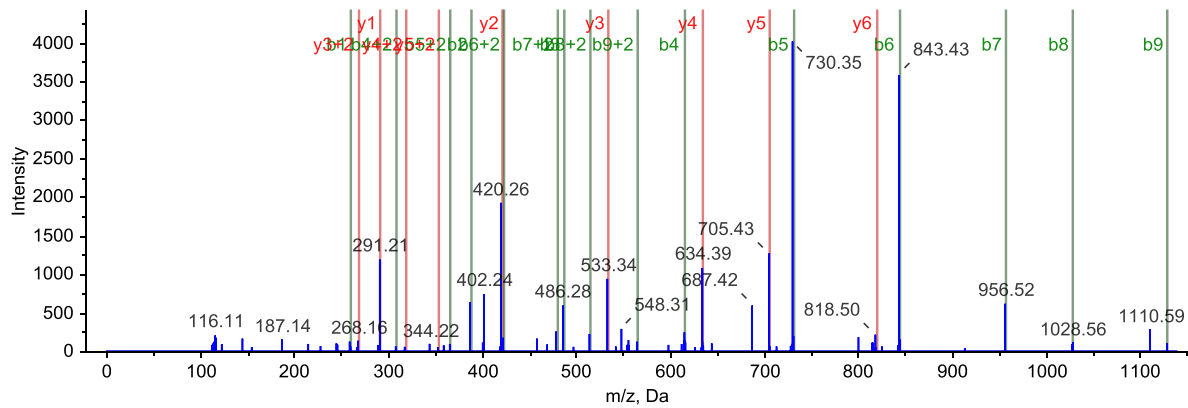
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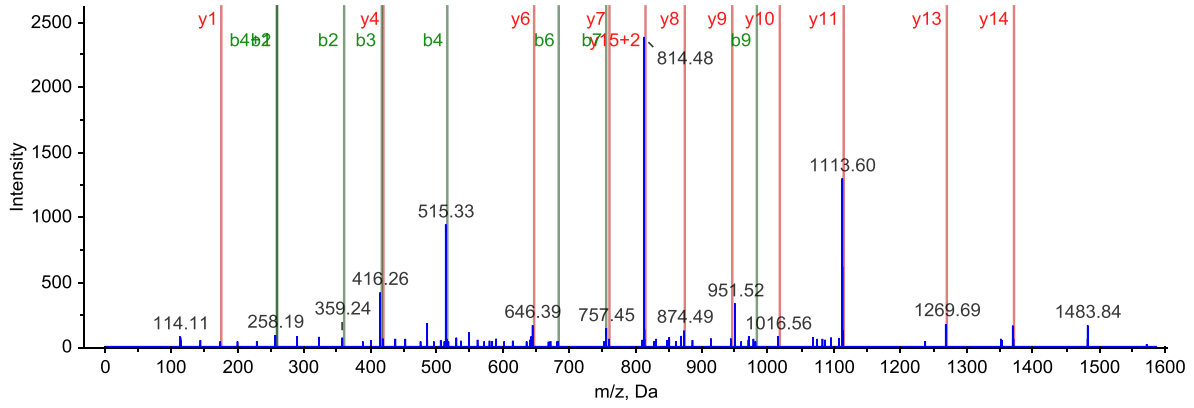
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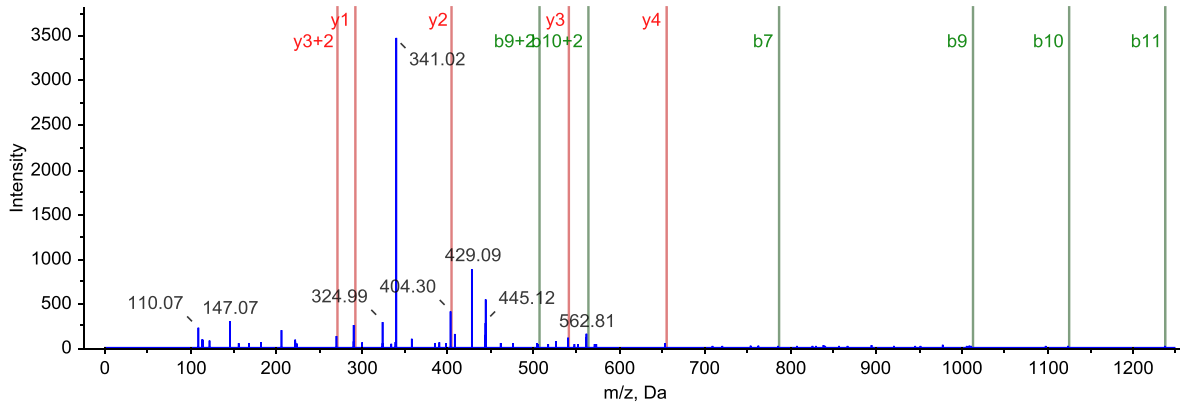
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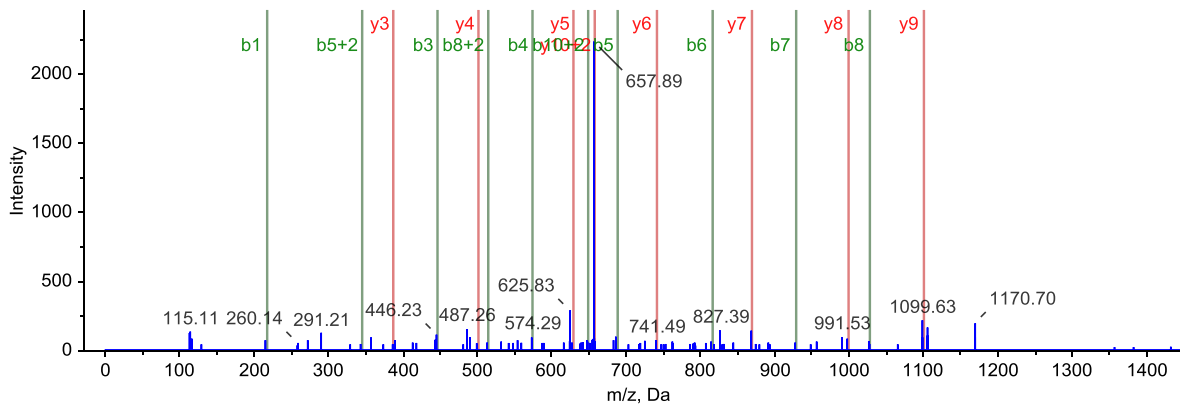
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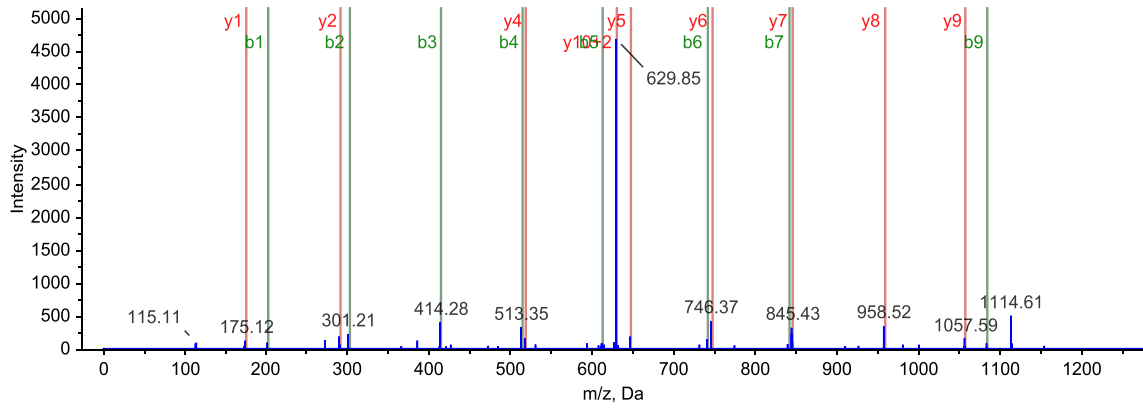
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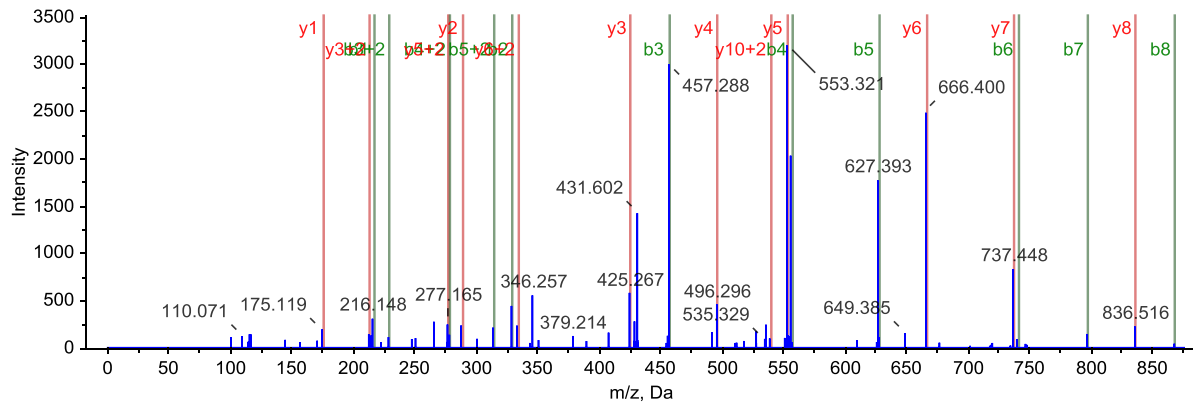
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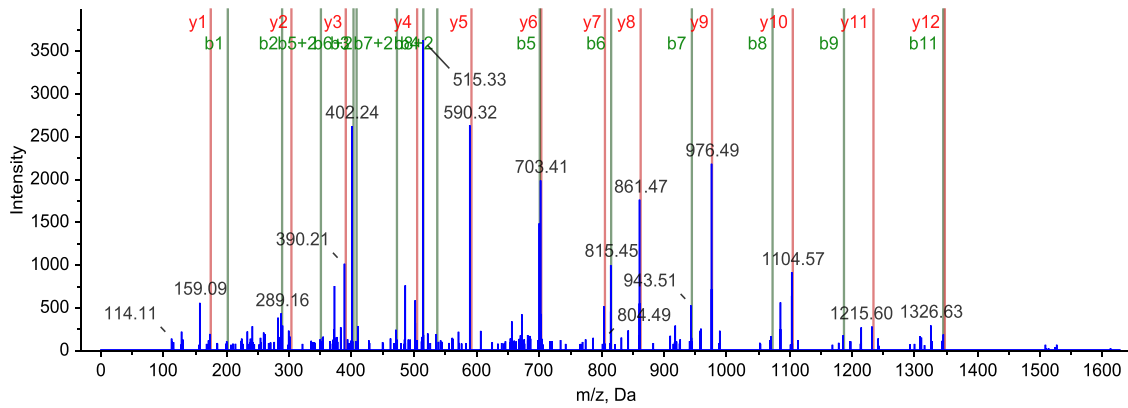
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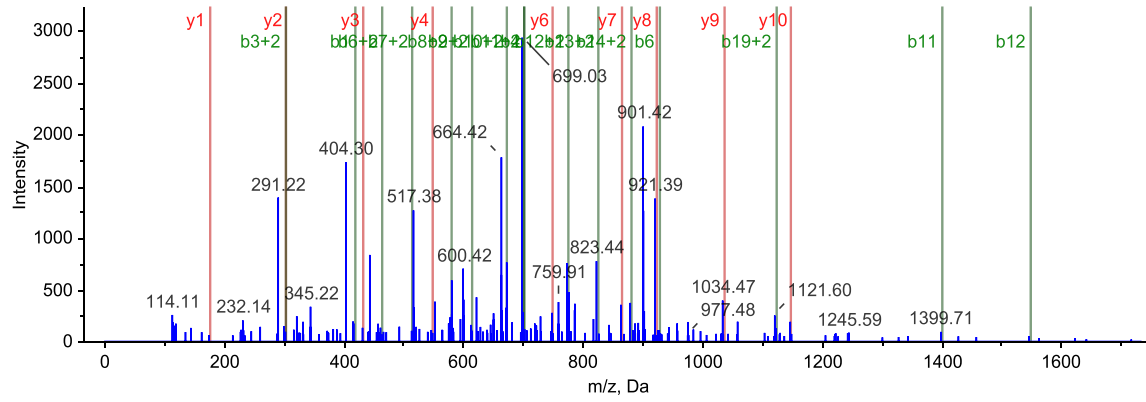
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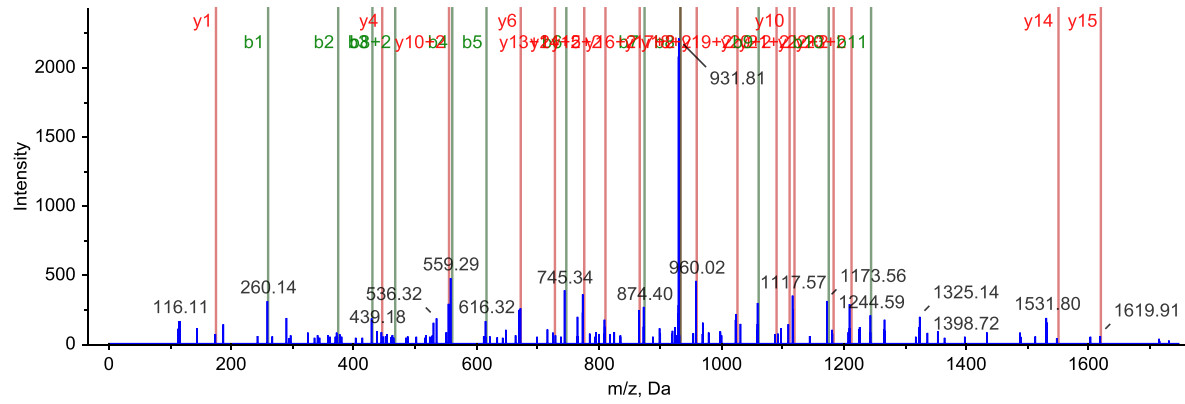
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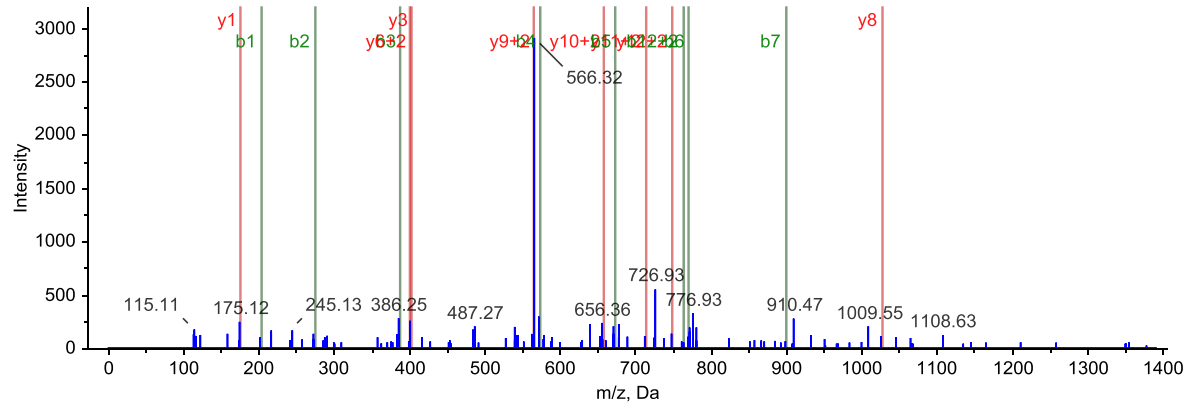
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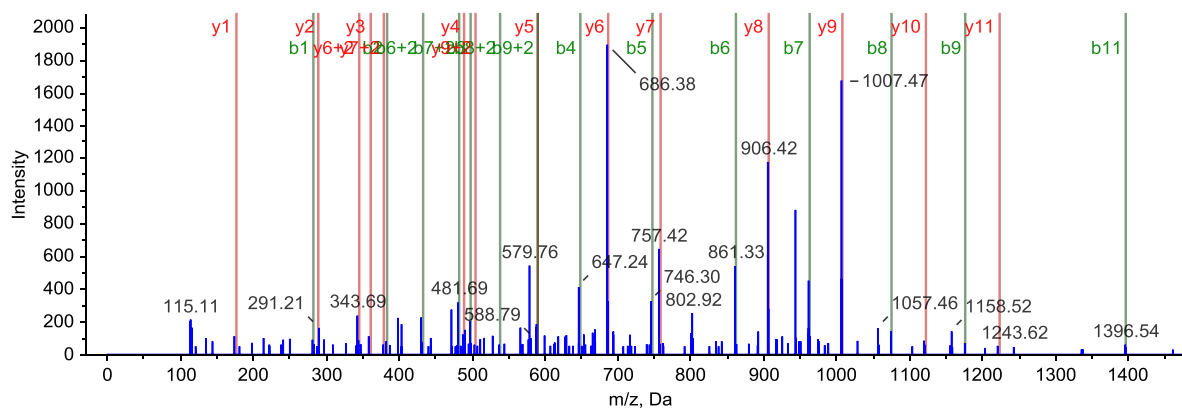
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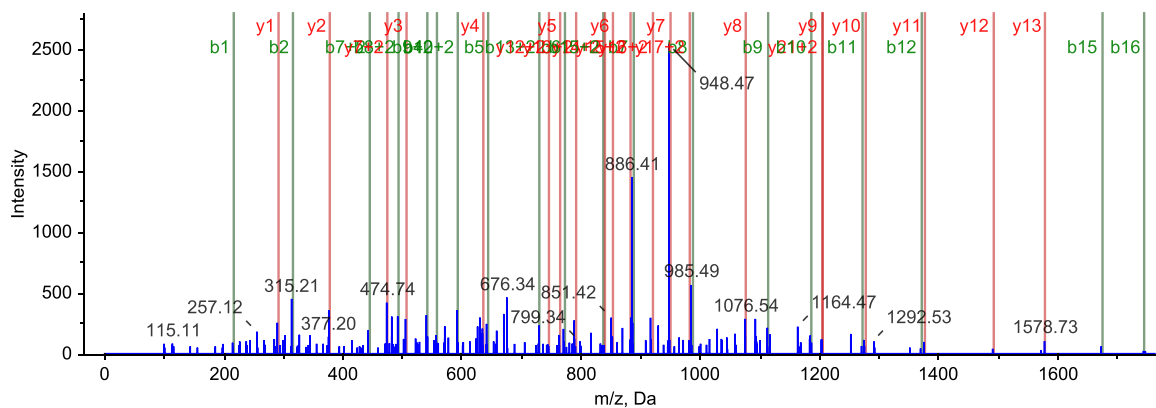
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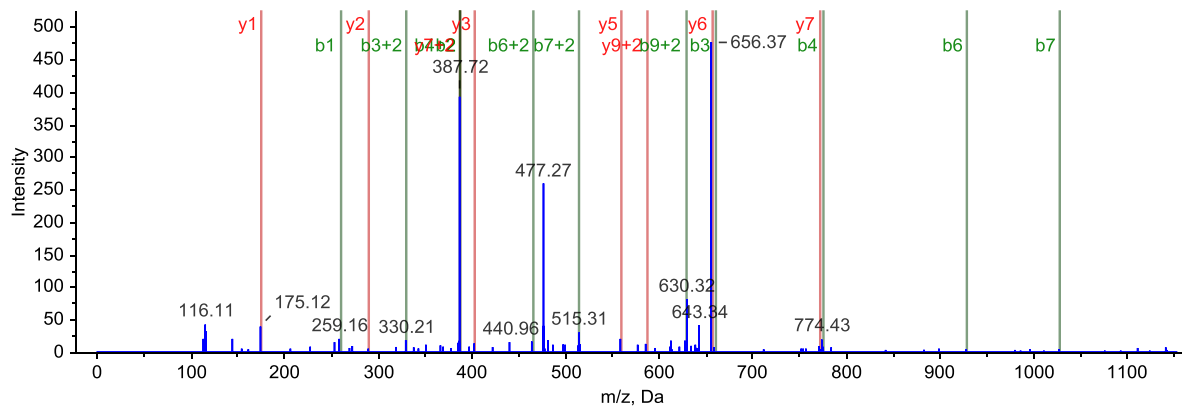
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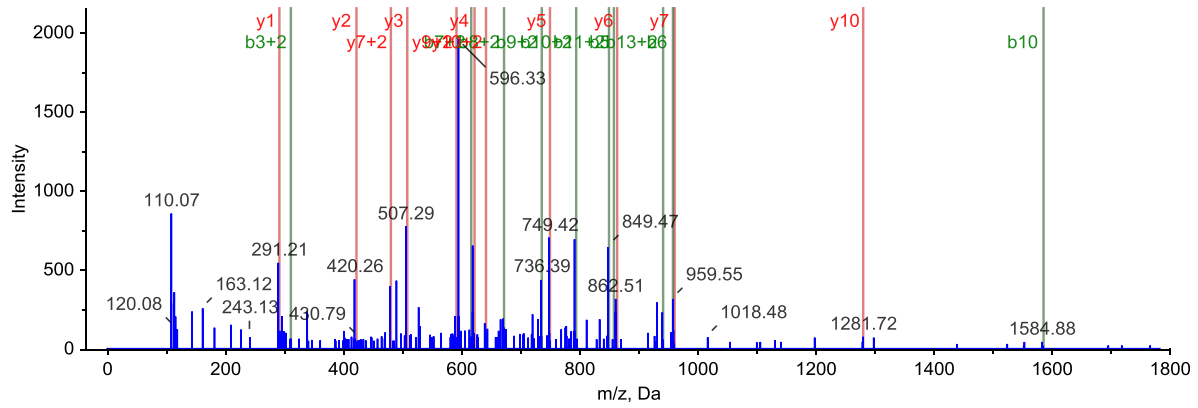
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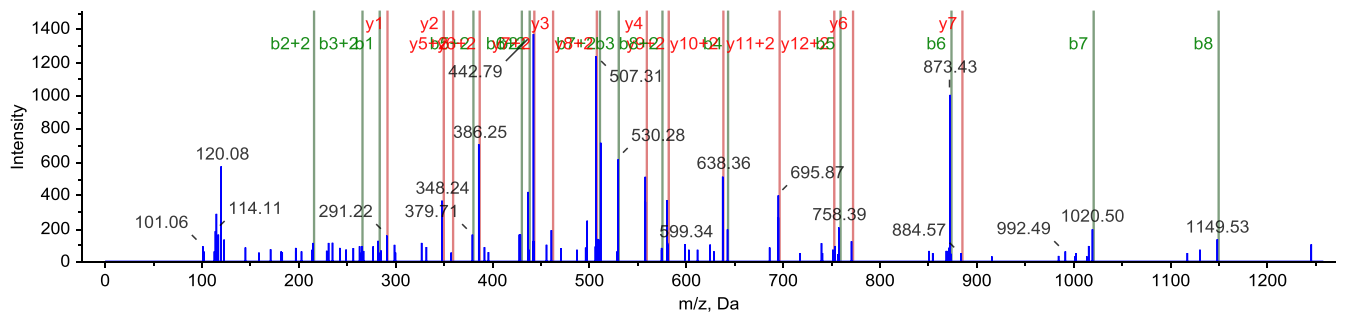
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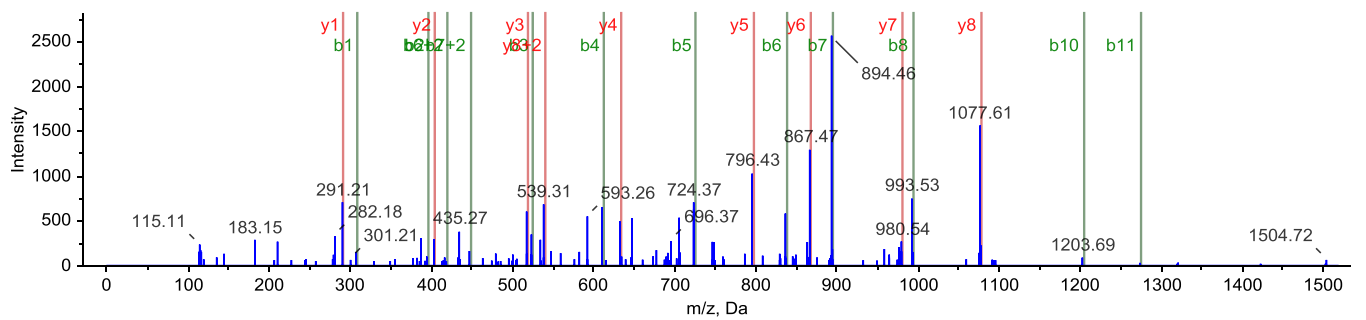
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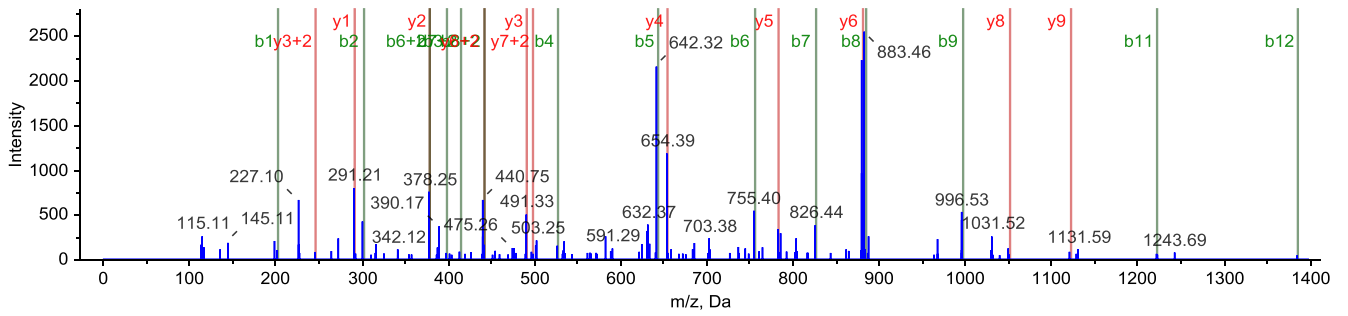
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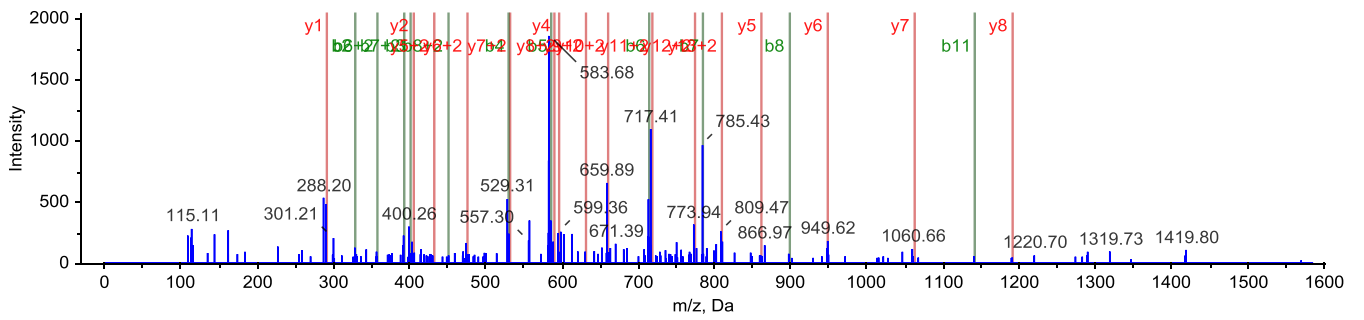
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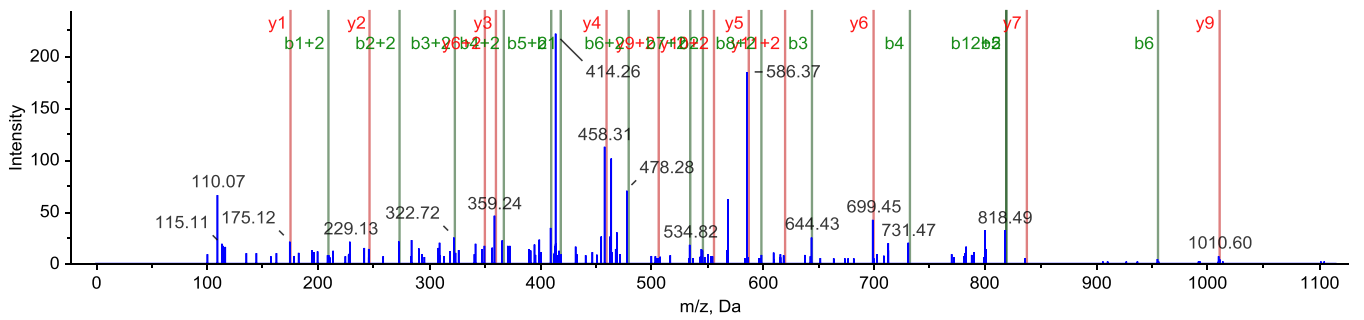
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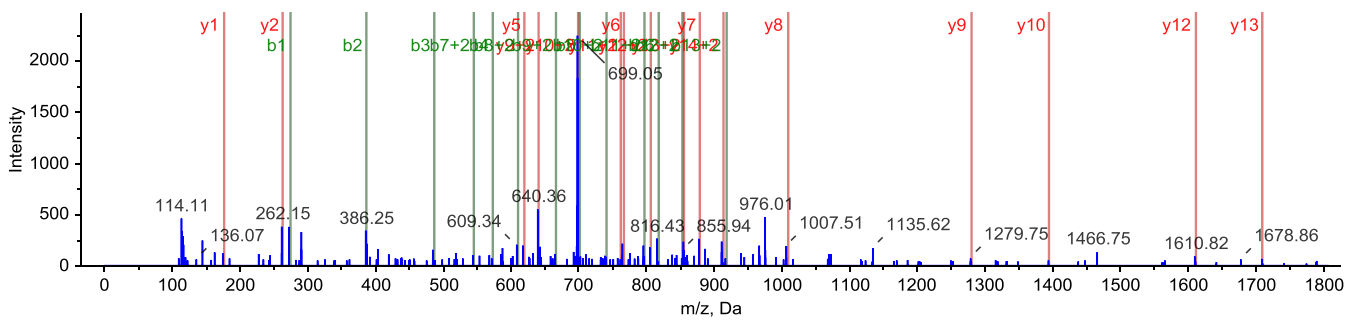
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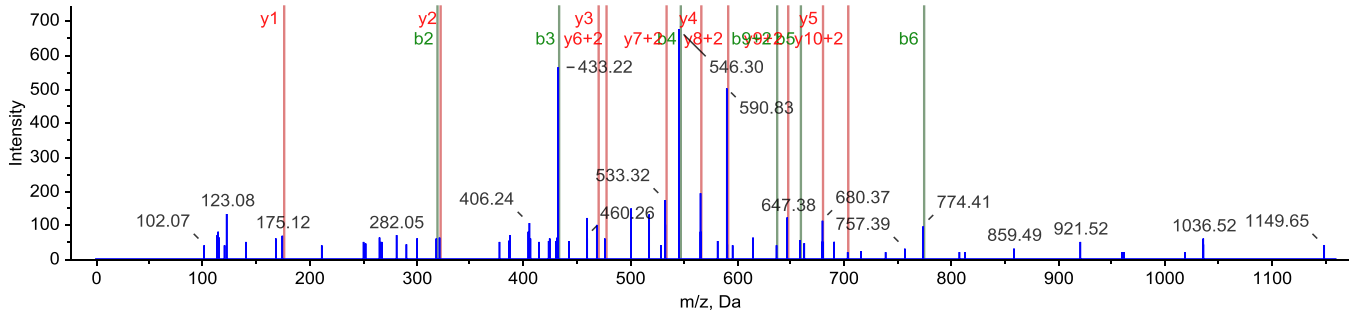
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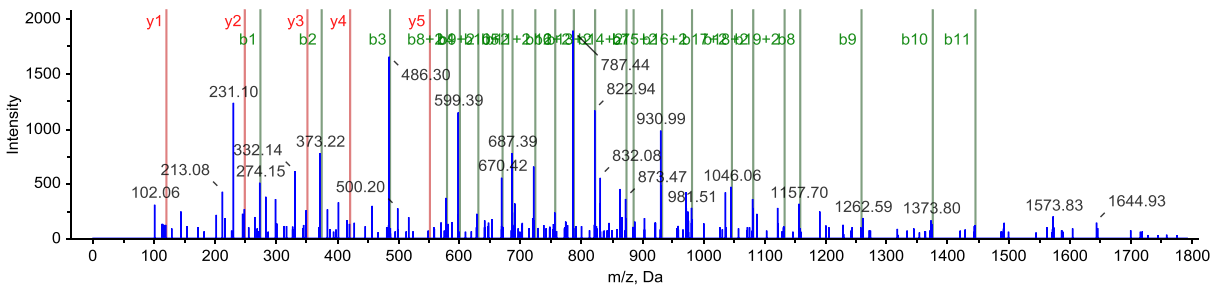
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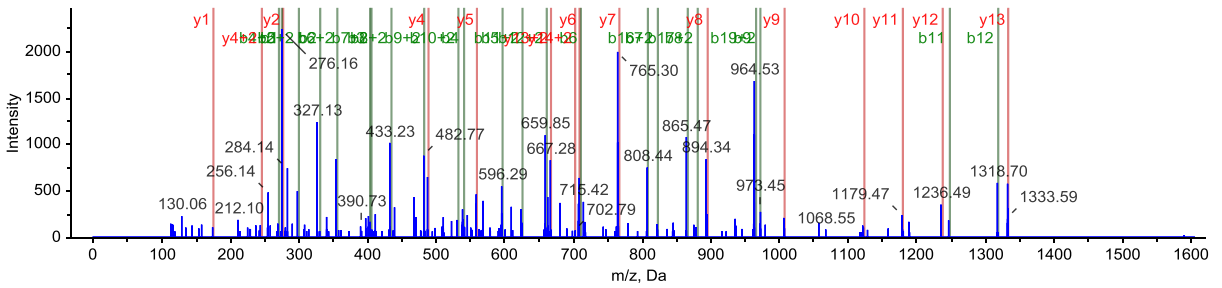
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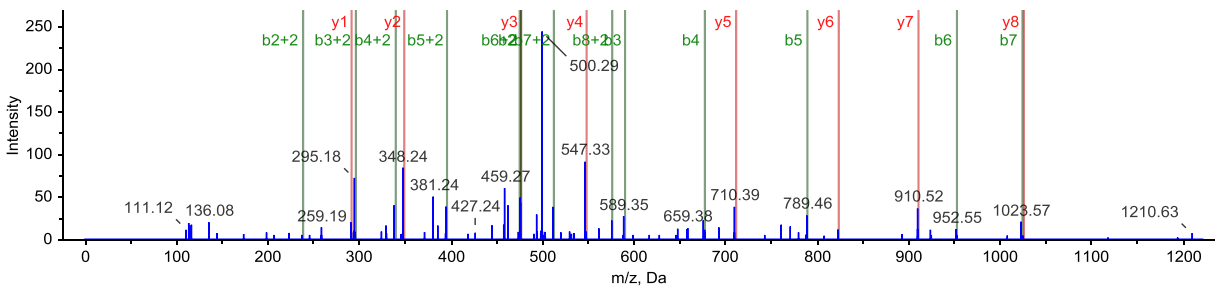
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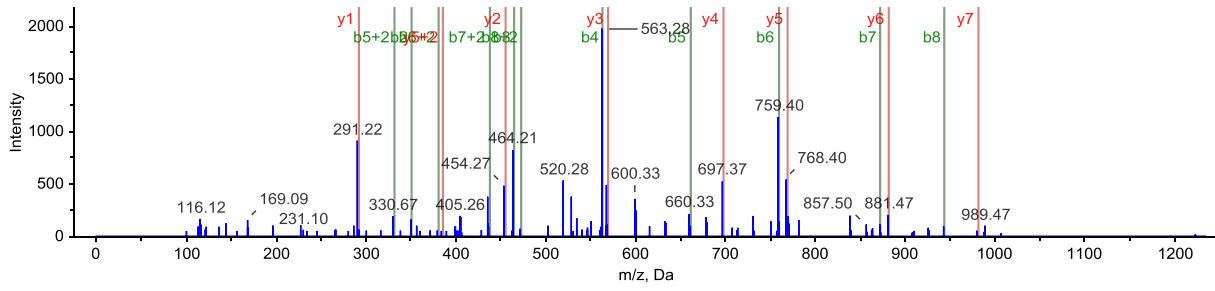


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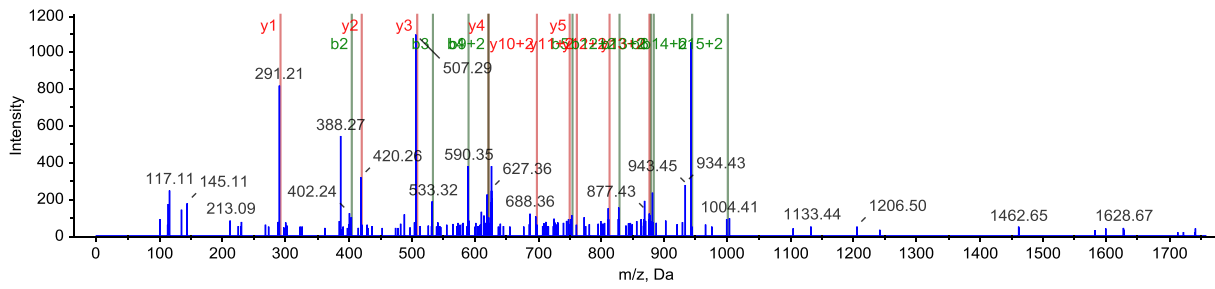




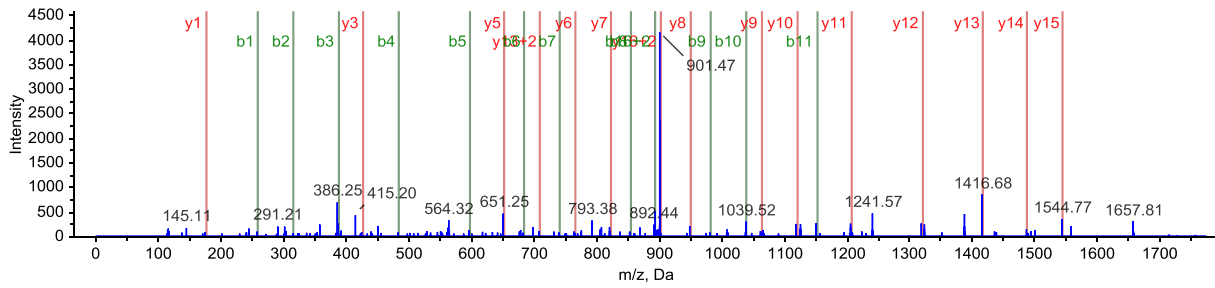
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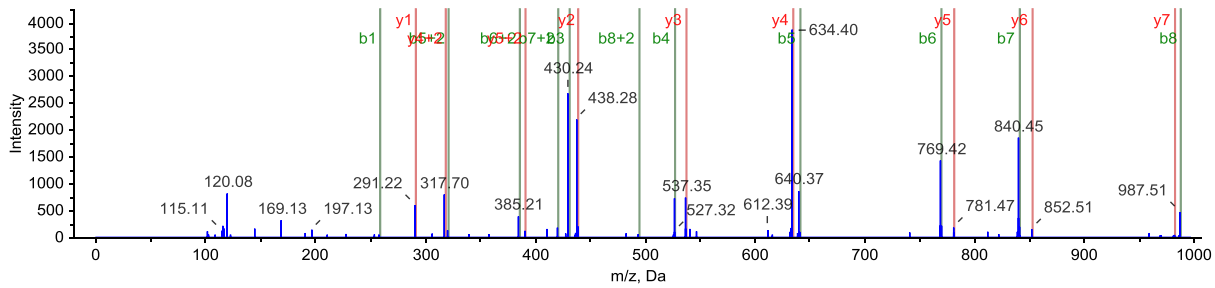
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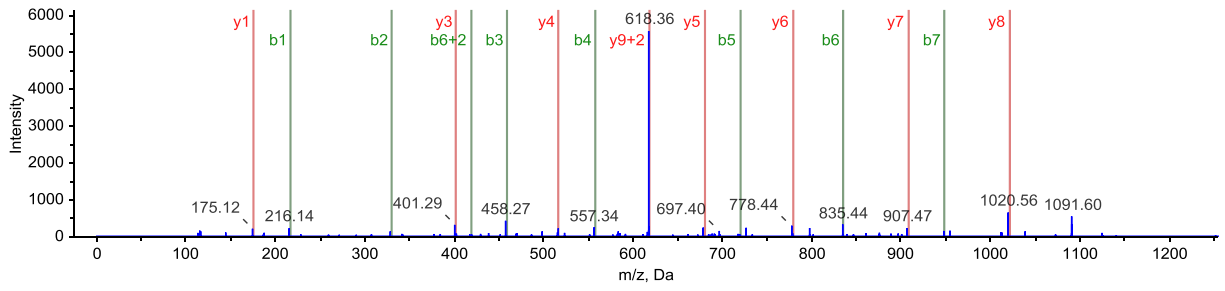
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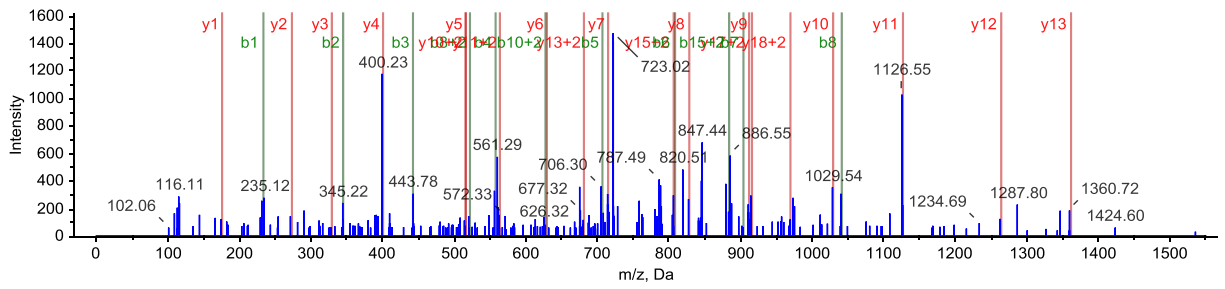
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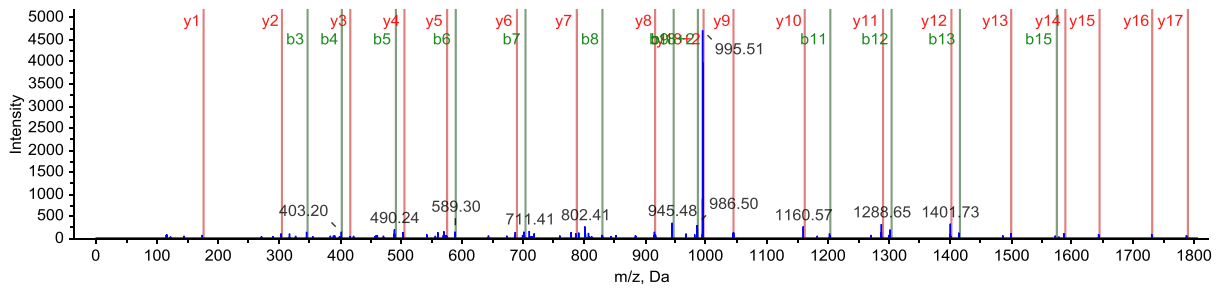
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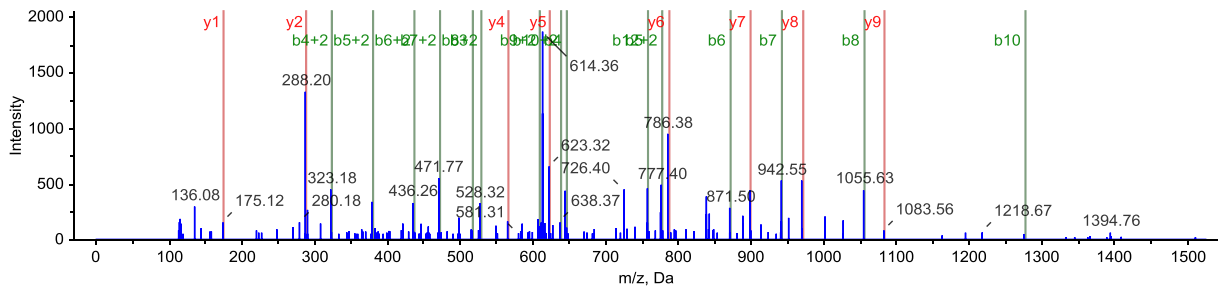
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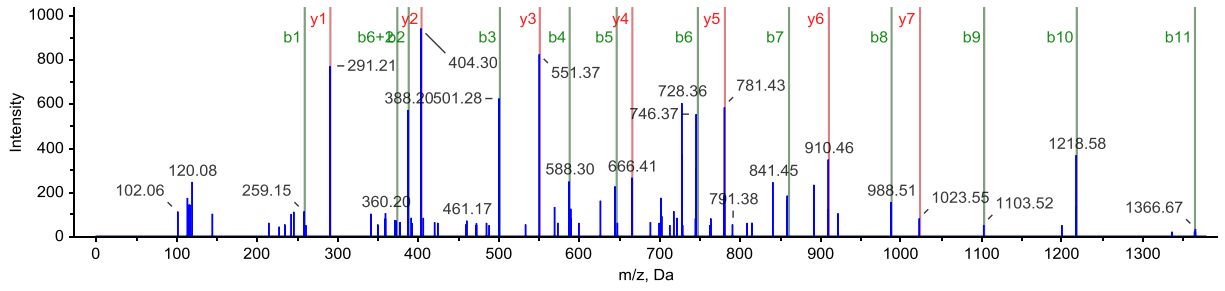
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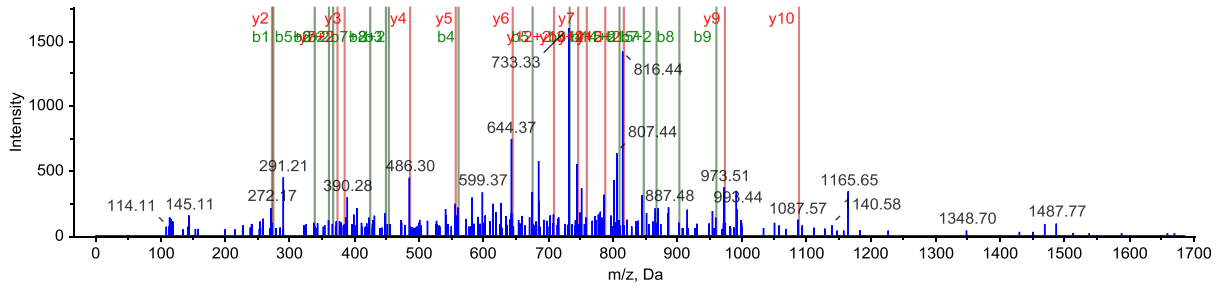
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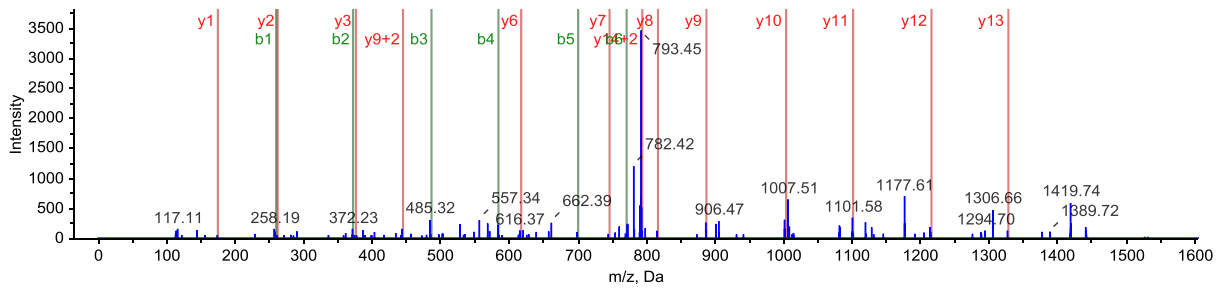
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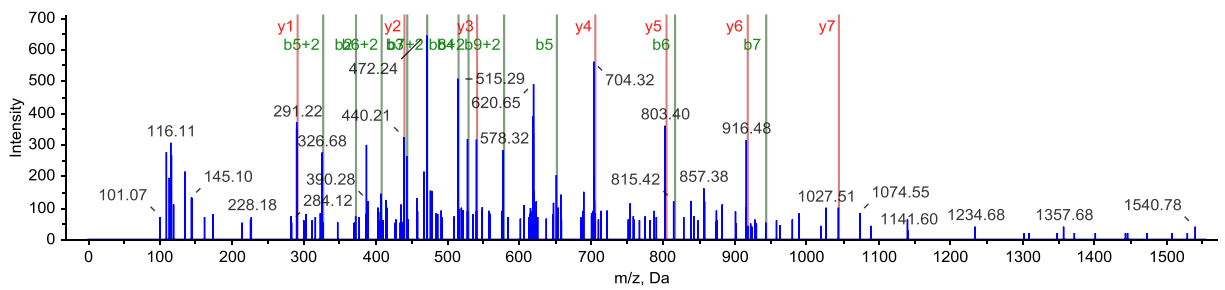
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40.



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FXN Isoform 1 of Frataxin, mitochondrial (matched peptide LGGDLGTYVINK); 5. PRTFDC1 Isoform 1 of Phosphoribosyltransferase domain-containing protein 1 (matched peptide NVLIVEDVVGVTGR); 6. NCSTN Isoform 2 of Nicastrin (matched peptide NQVEDLLATLEK); 7. EHHADH peroxisomal bifunctional enzyme isoform 2 (matched peptide LTGVPAALDLITSGR); 8. PLCL2 Isoform 1 of Inactive phospholipase C-like protein 2 (matched peptide DSVPGVSPQLLHIK); 9. IPO4 Isoform 2 of Importin-4 (matched peptide ATEQLQIVLR); 10. TACO1 Translational activator of cytochrome c oxidase 1 (matched peptide GVIVVEVEDR); 11. GTPBP3 tRNA modification GTPase GTPBP3, mitochondrial isoform VII (matched peptide ALQVALGAHLR); 12. C19orf63 Isoform 3 of UPF0510 protein INM02 (matched peptide GLLWNQQDGTLSLSQR); 13. LOC729852 cDNA FLJ54628 (matched peptide KPSVPETEADGFVLLGDTTDEQR); 14. FAM134A Protein FAM134A (matched peptide DLGEGEEGELAPPEDLLGRPQALS); 15. ENDOG Endonuclease G, mitochondrial (matched peptide GALWVVEQLRPER); 16. NOTUM Uncharacterized protein (matched peptide HTDCVDTITCAPTEAIR); 17. ZFAND6 Isoform 1 of AN1-type zinc finger protein 6 (matched peptide AVPETEDVQASVSDTAQQPSEEQSK); 18. S100A11 Protein (matched peptide NQKDPGVLDLDR); 19. POMP Proteasome maturation protein (matched peptide KGFSCVKNELLPSHPLELSEK); 20. AURKB cDNA FLJ57406, highly similar to Serine/threonine-protein kinase 12 (matched peptide HFTIDDFEIGRPLGK); 21. TWISTNB DNA-directed RNA polymerase I subunit RPA43 (matched peptide YSESLLGVPPIAYDNIK); 22. TRPV2 Transient receptor potential cation channel subfamily V member 2 (matched peptide GVPEDLAGLPEYLSK); 23. WDR37 cDNA FLJ76685, highly similar to Homo sapiens WD repeat domain 37 (WDR37), mRNA (matched peptide LAAEGQAIDGAELSKGQLK); 24. TEAD3 Transcriptional enhancer factor TEF-5 (matched peptide KQVSSHIQVLAR); 25. MIS18A Protein Mis18-alpha (matched peptide QIVSEDKELFNLES); 26. CARM1 Isoform 3 of Histone-arginine methyltransferase CARM1 (matched peptide SSNLLDLKNPFFR). 27. MRPS16 28S ribosomal protein S16, mitochondrial (matched peptide EVLLASQKTDAEATDTEATET); 28. RNF149 Uncharacterized protein (matched peptide EGAGHLVGVWPAPGGDLEGCAPDTR); 29. RPL36A 60S ribosomal protein L36a isoform a (matched peptide GKDSLVAQGGK); 30. LTF cDNA FLJ78440, highly similar to Human lactoferrin (matched peptide CGLVPVLAENYK); 31. MSL1 Isoform 1 of Male-specific lethal 1 homolog (matched peptide LFQGYETEEREETELSEK); 32. PDLIM4 Isoform 1 of PDZ and LIM domain protein 4 (matched peptide LGAPLSGLQGLPECTR); 33. NAA40 cDNA FLJ58929 (matched peptide LGDPLEAFPVFK); 34. FAM96A MIP18 family protein FAM96A (matched peptide ALEVYDLIR); 35. DLGAP4 Isoform 2 of Disks large-associated protein 4 (matched peptide SLPDCTPHPNSISIDAGPR); 36. UBAP1 ubiquitin-associated protein 1 isoform 3 (matched peptide GGSGSVLQDEEVLASLER); 37. CASC3 cDNA FLJ60283, highly similar to Protein CASC3 (matched peptide SRQELIALYGYDIR); 38. C11orf57 Isoform 1 of Uncharacterized protein C11orf57 (matched peptide NEISGTLEDDFLK); 39. PPP1R13L cDNA FLJ26816 fis, clone PRS06437 (matched peptide ESSLDGLGGTGKDNLTSATLPR); 40. SYT11 Synaptotagmin-11 (matched peptide NLLVDAAEAGLLSR); 41. DN LZ

Uncharacterized protein (matched peptide VEAAHYQLVYTCK); 42. TOR1AIP2 interferon alpha responsive protein isoform a (matched peptide VAGFNPALQLILTR); 43. LGALS7B;LGALS7 Galectin-7 (matched peptide LVEVGGDVQLDSVR); 44. PVRL1 Isoform Delta of Poliovirus receptor-related protein 1 (matched peptide YDEDAKRPYFTVDEAEAR); 45. NGLY1 Isoform 1 of Peptide-N(4)-(N-acetyl-beta-glucosaminyl)asparagine amidase (matched peptide LLLTYADNILR).