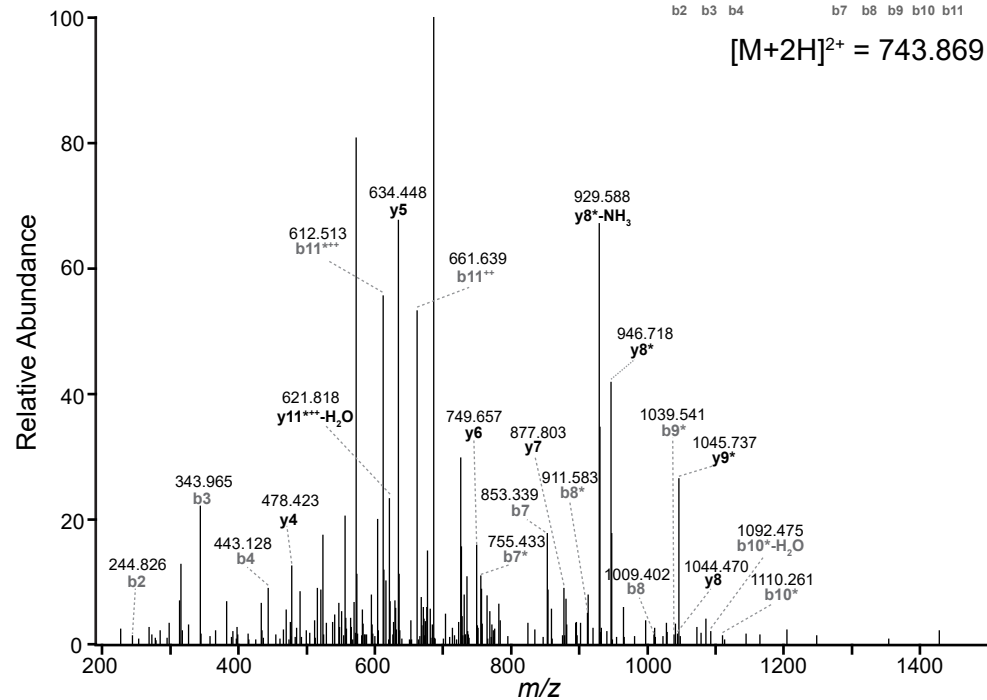
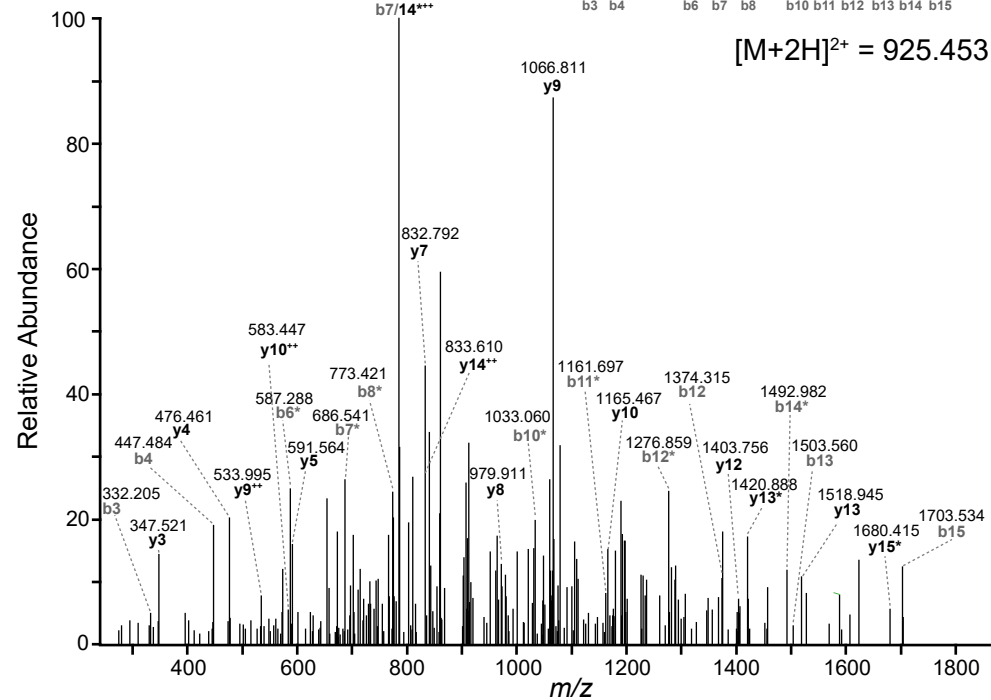


S6

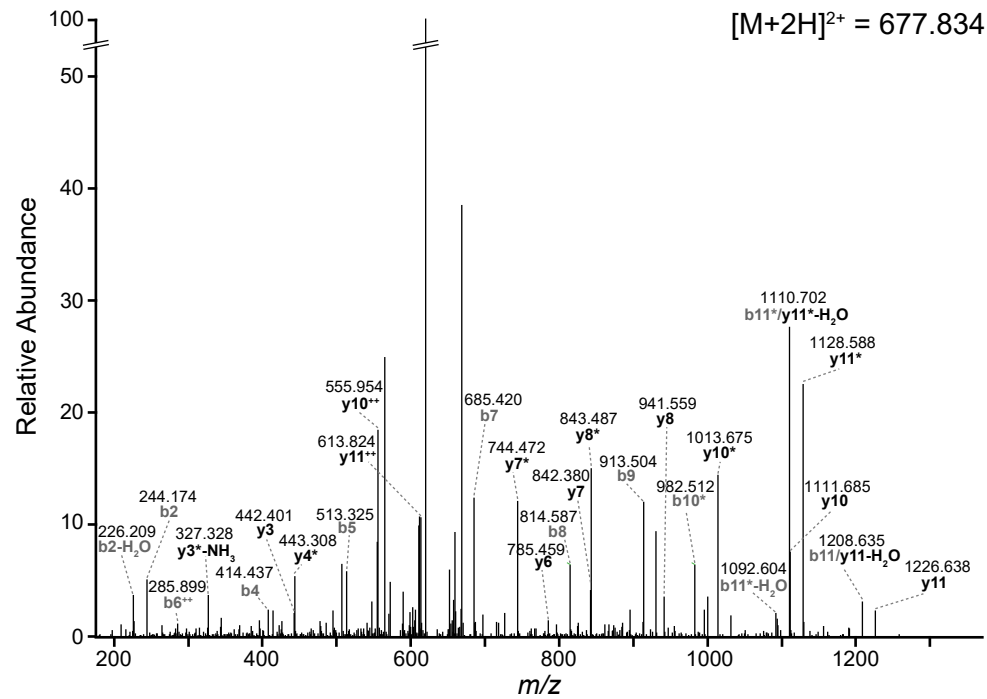
acS**D**V**V****ps**K**D**R**K**A**L**F
 y11 y10 y9 y8 y7 y6 y5 y4
 b2 b3 b4 b7 b8 b9 b10 b11

 $[M+2H]^{2+} = 743.869$
**S15**

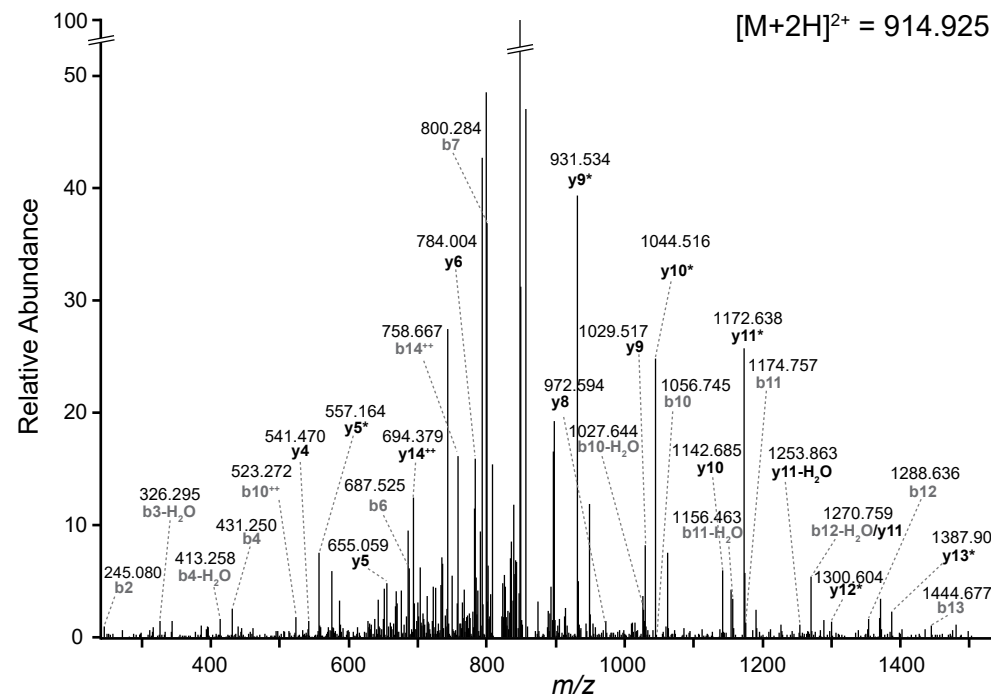
A**L**F**D****ps**A**V**S**F**L**K**D**E**S**I**K
 y15 y14 y13 y12 y10 y9 y8 y7 y5 y4 y3
 b3 b4 b6 b7 b8 b10 b11 b12 b13 b14 b15

 $[M+2H]^{2+} = 925.453$
**S65**

K**D**G**I**V**G**D**E**V**ps**K**K**
 y11 y10 y8 y7 y6 y4 y3
 b2 b4 b5 b6 b7 b8 b9 b10 b11

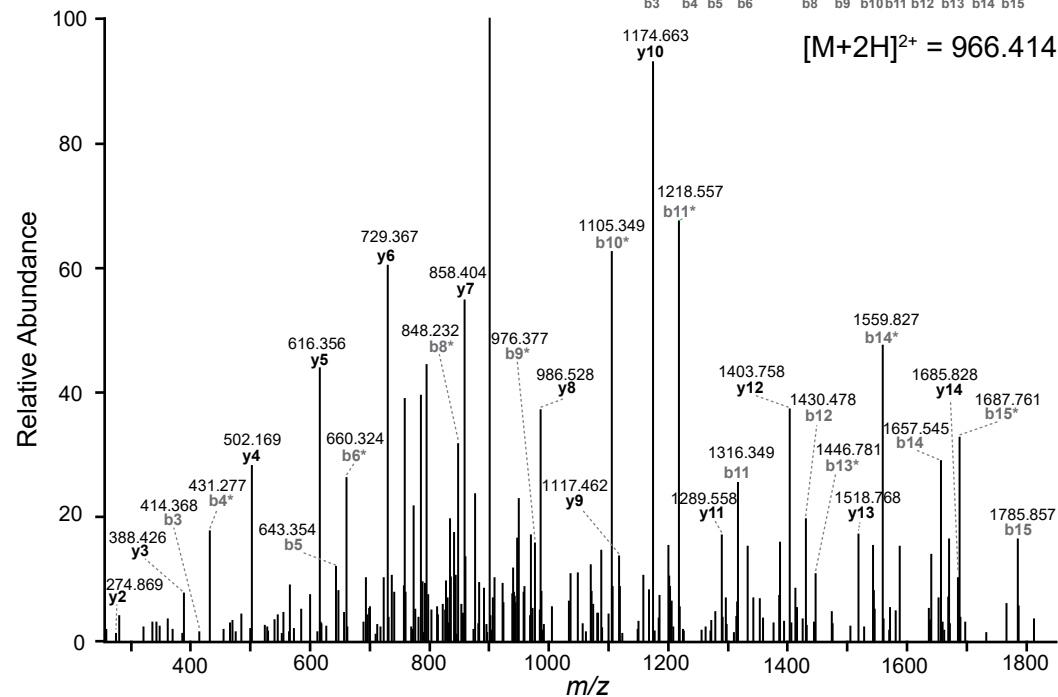
 $[M+2H]^{2+} = 677.834$
**S76**

D**E**V**S**K**K**I**G**S**T**E**N**R**A****ps****Q**
 y13 y12 y11 y10 y9 y8 y6 y5 y4
 b2 b3 b4 b6 b7 b8 b10 b11 b12 b13 b14

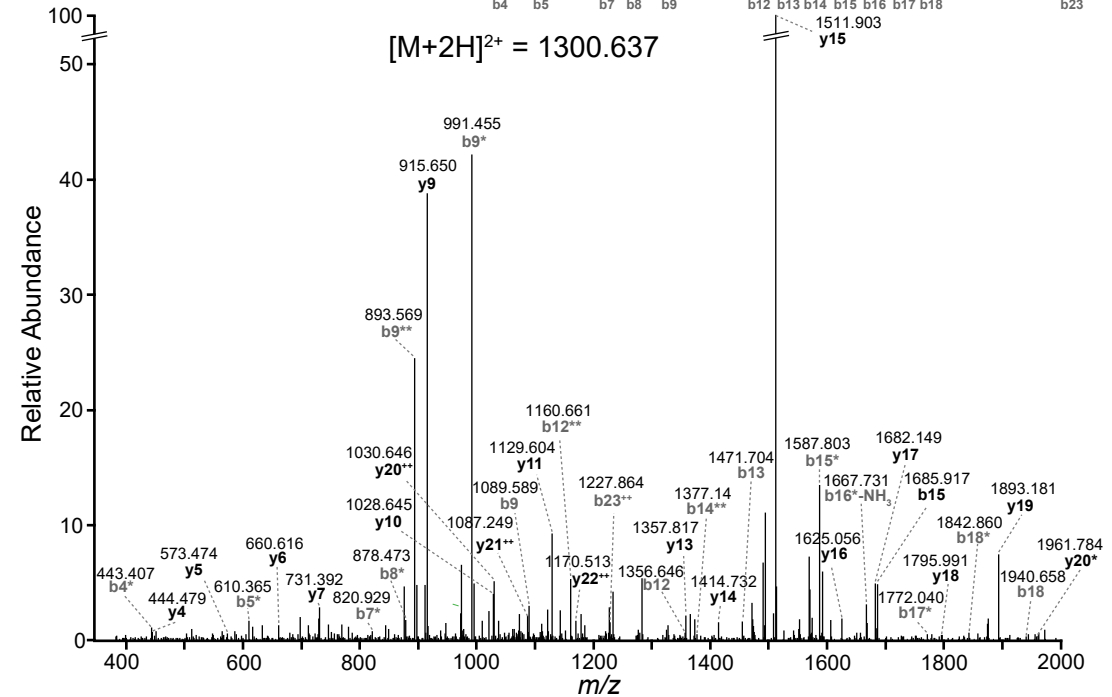
 $[M+2H]^{2+} = 914.925$


S214

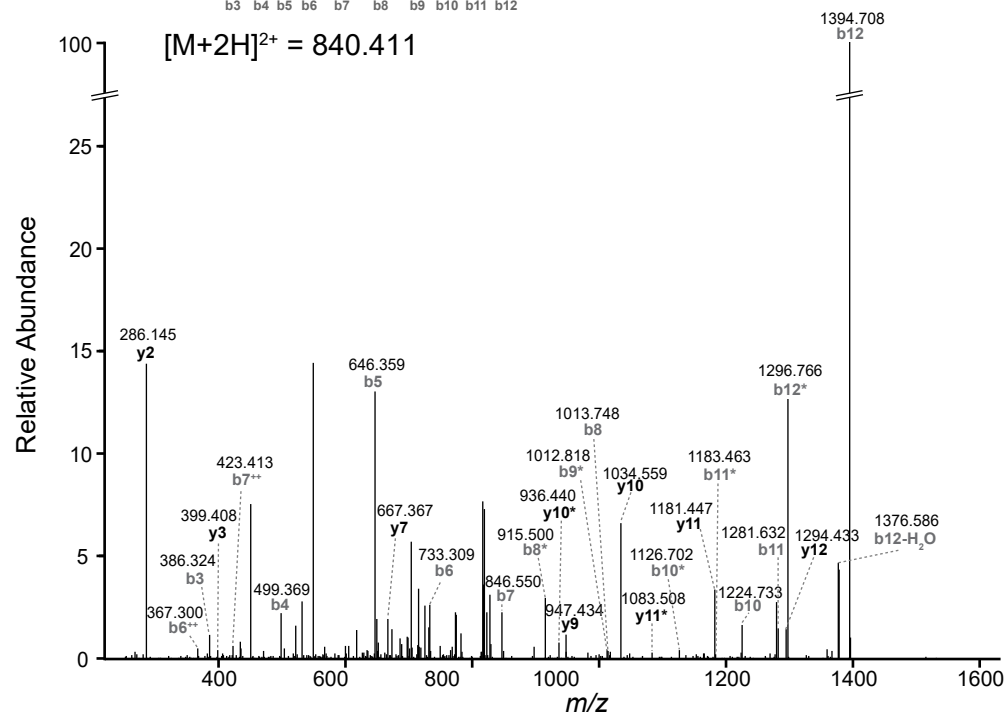
F[V]pSDNDGMQE[LNNI]QK
 b3 b4 b5 b6 b8 b9 b10b11 b12 b13 b14 b15

**S252 & S254**

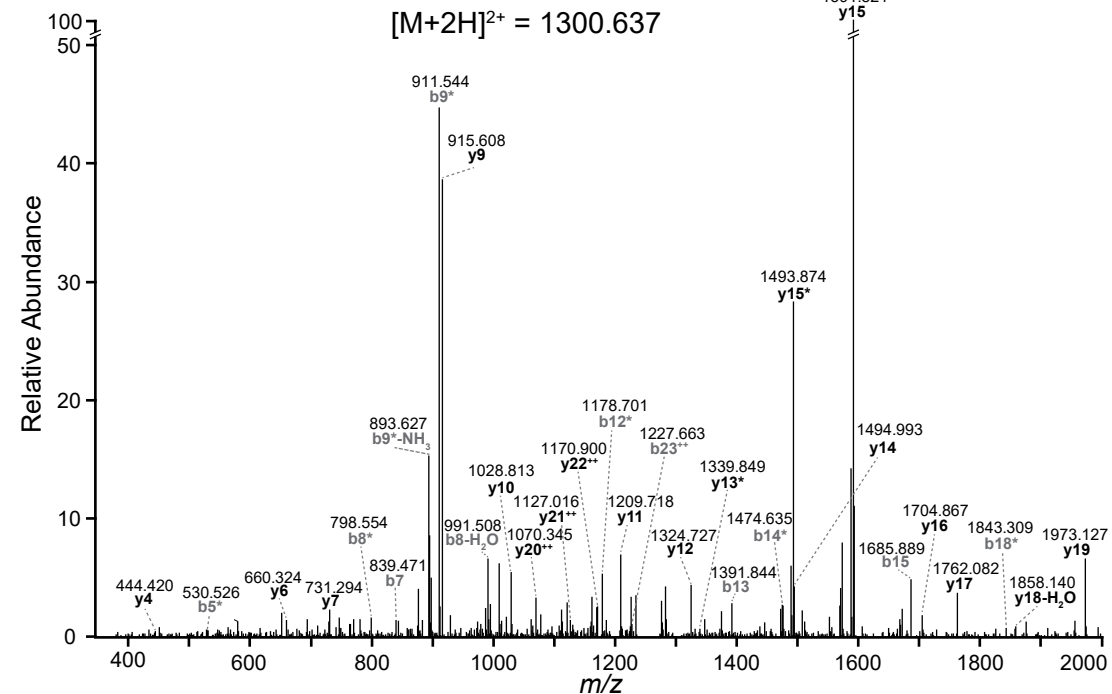
L[F]pS[pS]PNGI[P]GI[D]TIPSASEI]LAK
 b4 b5 b7 b8 b9 b12 b13 b14 b15 b16 b17 b18 b23

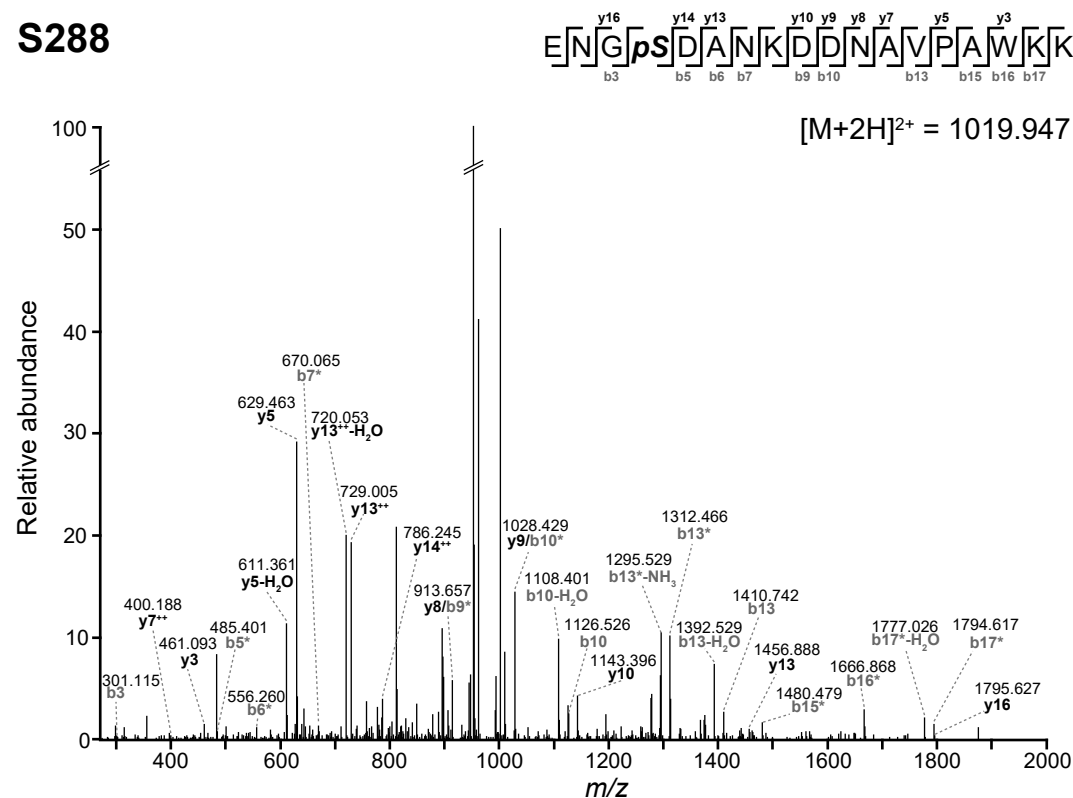
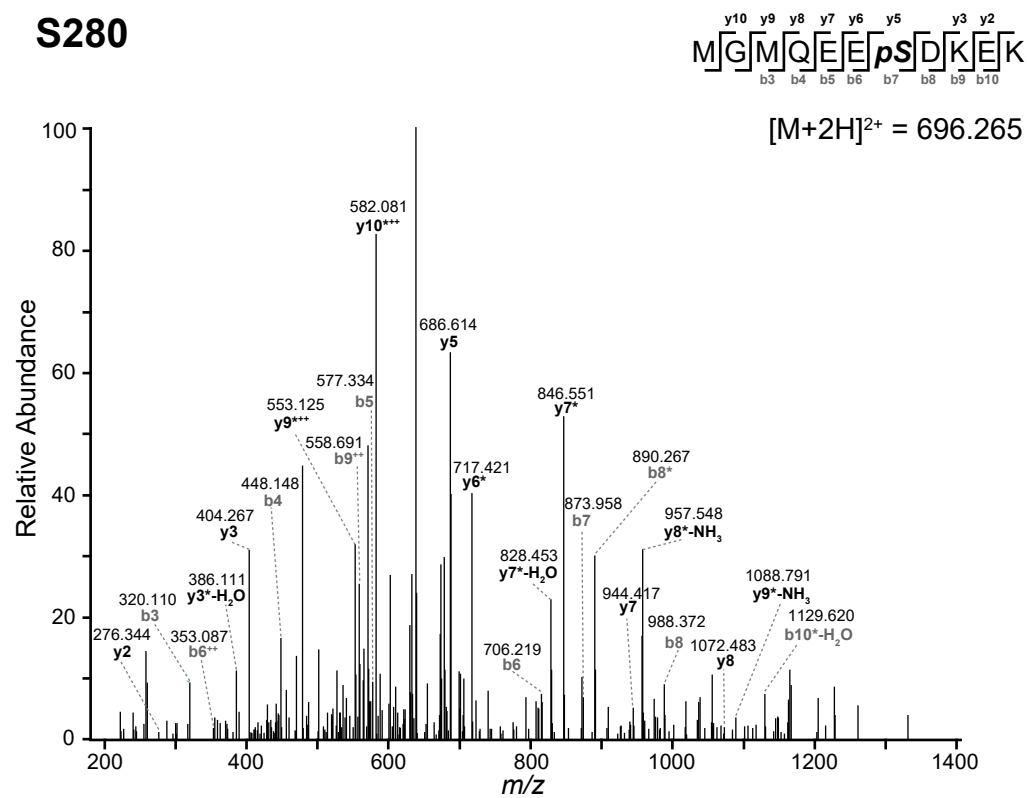
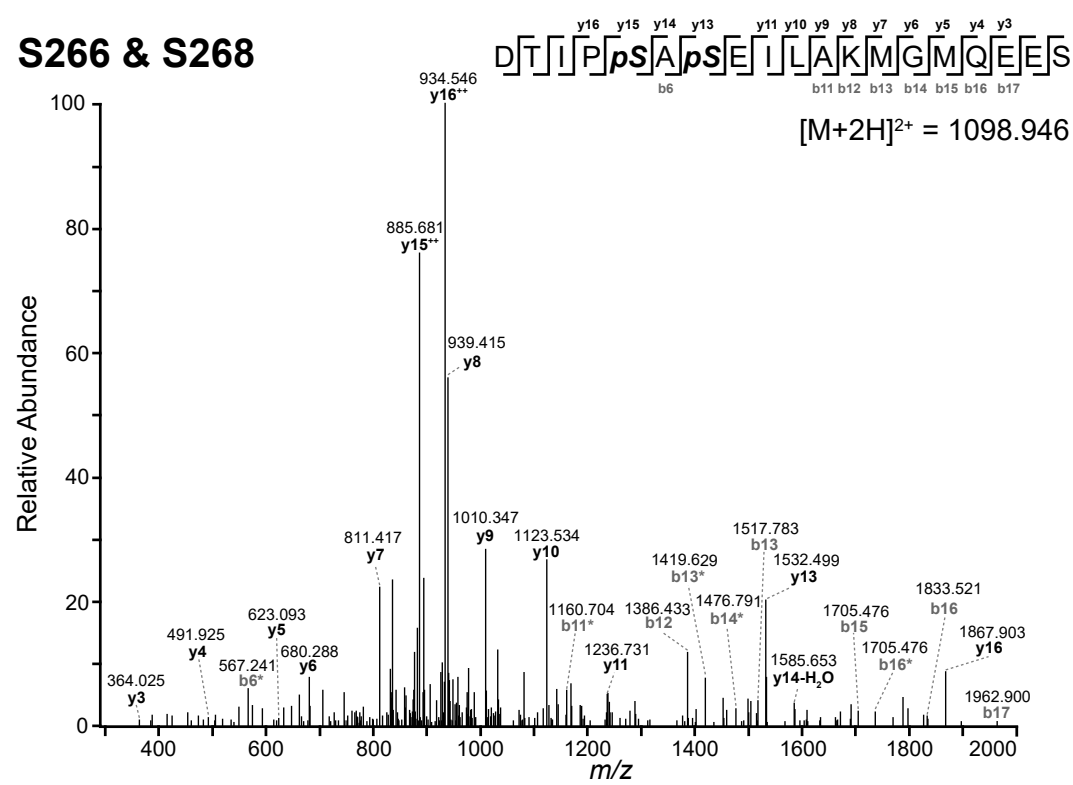
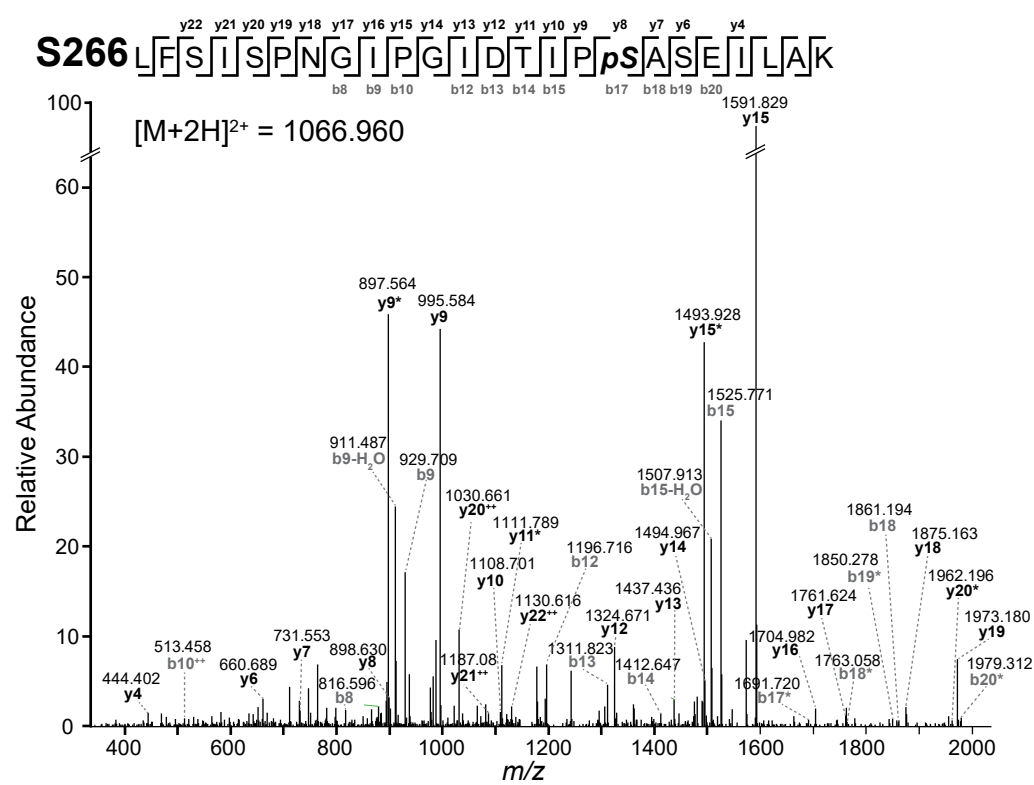
**S254**

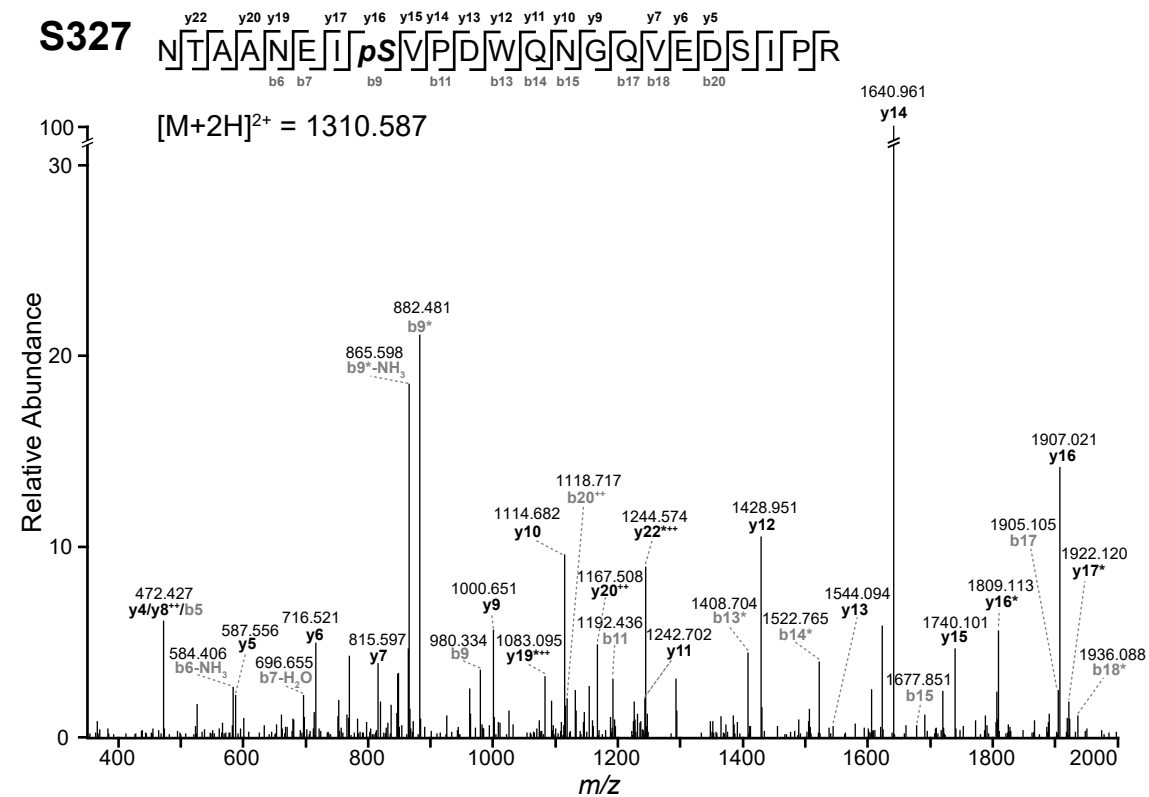
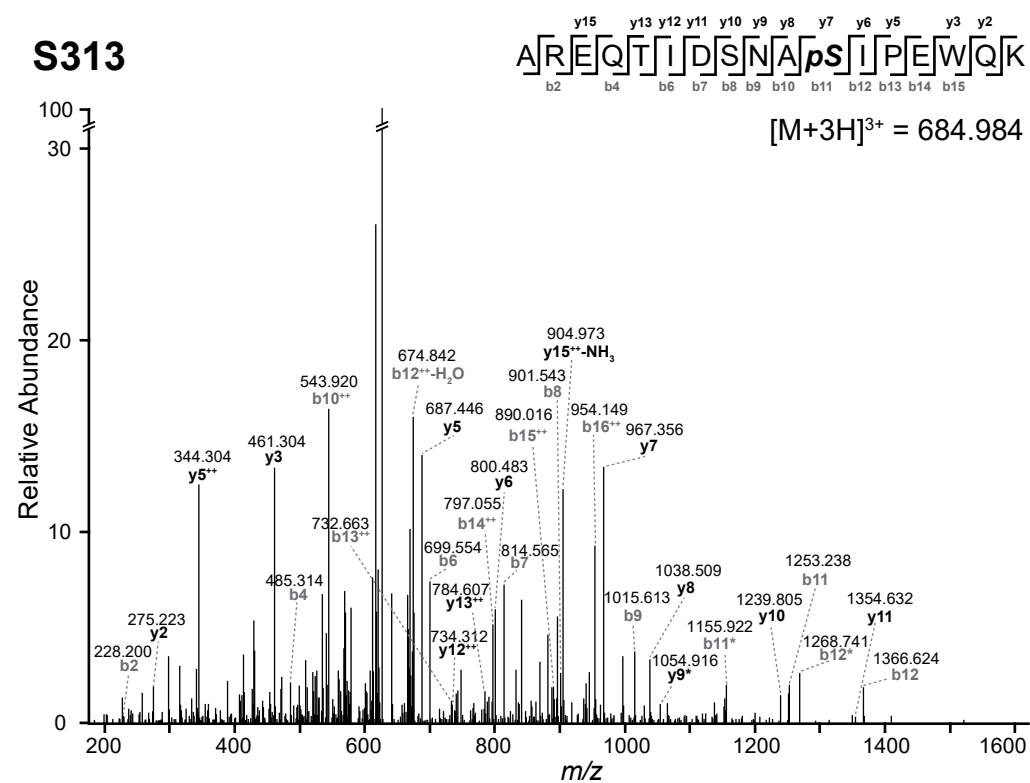
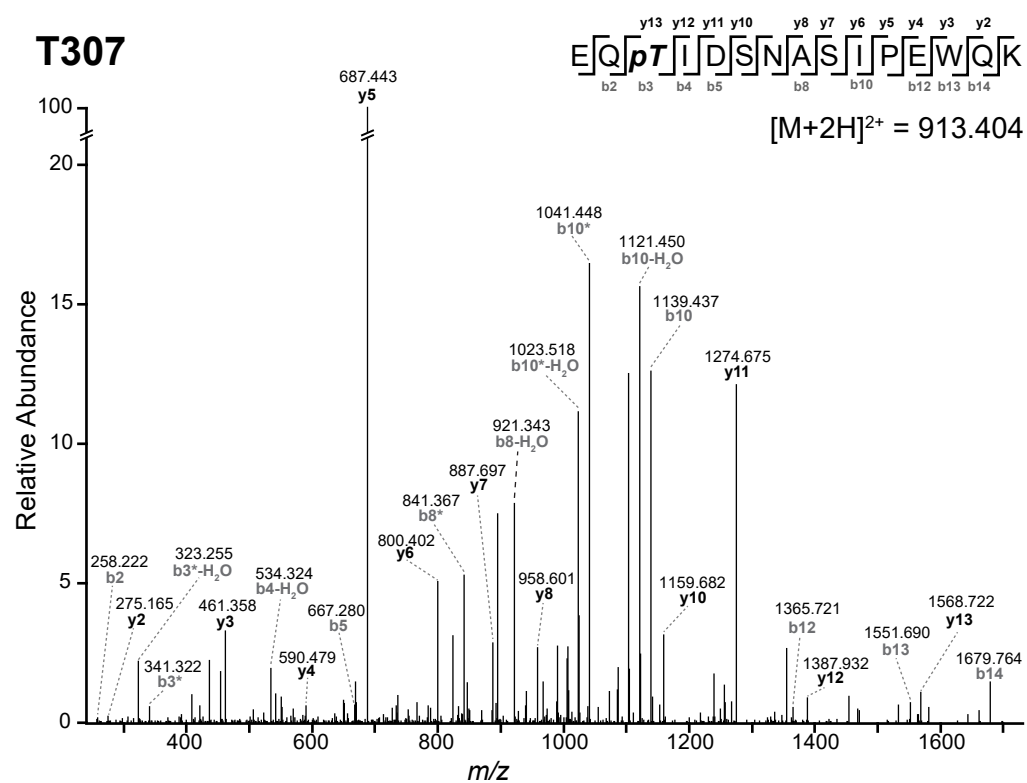
D[N]R[LFSI]pS[P]NGI[P]GI
 b3 b4 b5 b6 b7 b8 b9 b10 b11 b12

**S254 & T263**

L[F]S[pS]PNGI[P]GI[D]pTIPSASEI]LAK
 b5 b7 b8 b9 b12 b13 b14 b15 b18 b23







Supplementary Figure S2: Annotated MS/MS spectra of Pex14p peptide ions comprising the phosphorylation site(s) indicated in the figure. The spectra were acquired on an LTQ-Orbitrap XL using MSA for fragmentation of the precursor ion. ++, doubly protonated fragment ion; */** fragment ion with one/two neutral loss(es) of H₃PO₄; ac, acetylation.