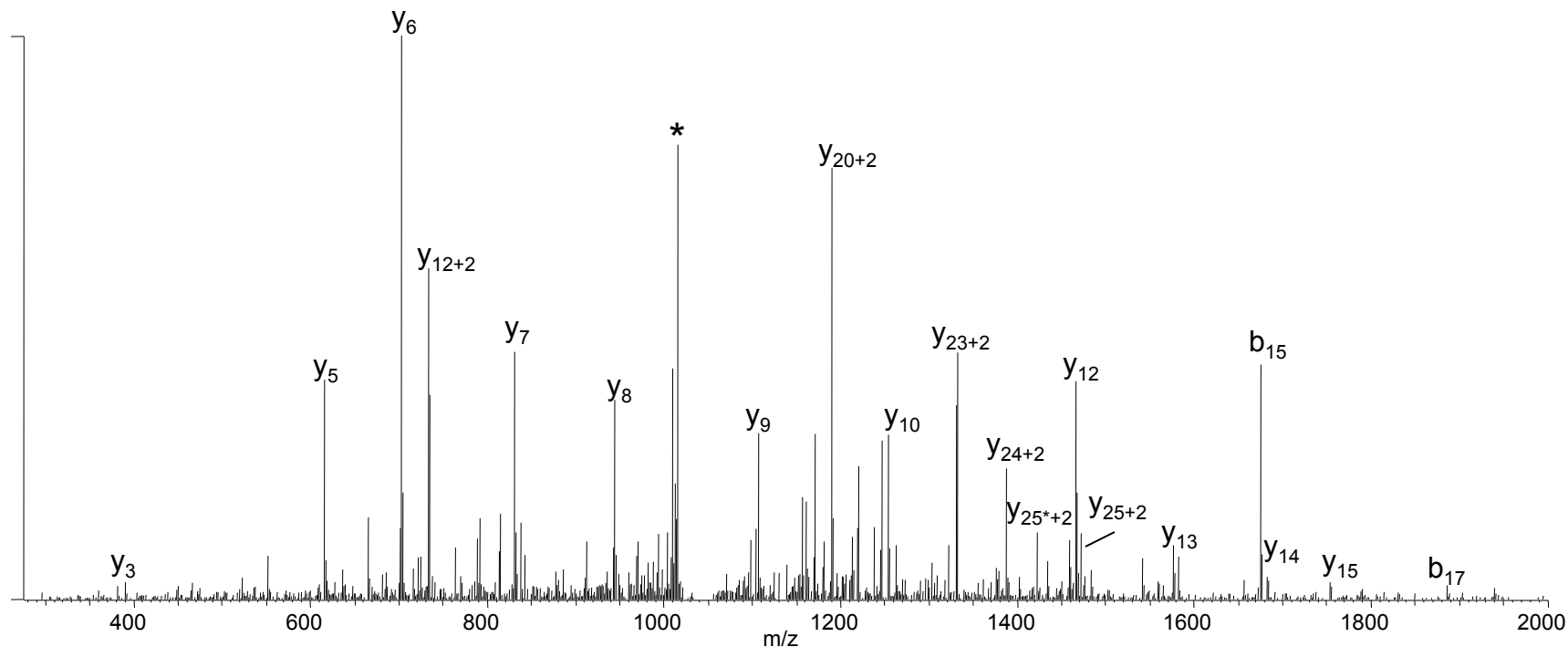


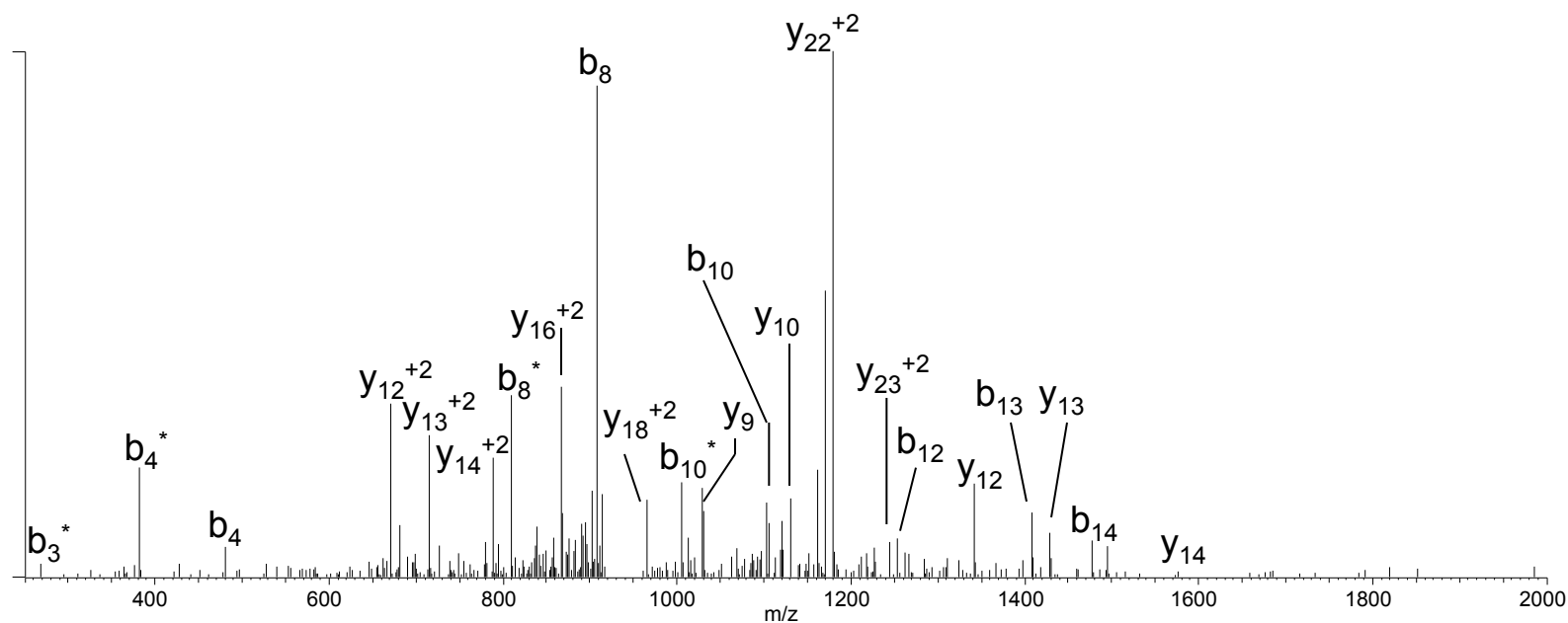
b 72 200 367 480 537 650 763 820 935 1064 1201 1387 1458 1559 1674 1771 1886 2033 2196 2309 2438 2525 2622 2750 2837 2966 3140  
 A Q pS L G L L G D E H W A T D P D M<sub>(ox)</sub> Y L Q S P Q S E R  
 3140 3069 2941 2774 2661 2604 2491 2377 2320 2205 2076 1939 1753 1682 1581 1466 1369 1254 1107 944 831 703 616 519 391 304 175 y



### Supplemental Figure S1. Identification of Serine-308 as a site of phosphorylation.

The amino acid sequence is provided above the spectrum, and the masses above and below the sequence correspond to the theoretical b- and y-type product ions, respectively. The masses provided are the singly-protonated, monoisotopic product ion masses. The observed singly-protonated product ions are underlined. For simplicity, all doubly protonated ions are not labeled in the spectra as they exist at 50% abundance or less. Asterisks indicate ions that result from neutral loss of H<sub>3</sub>PO<sub>4</sub>.

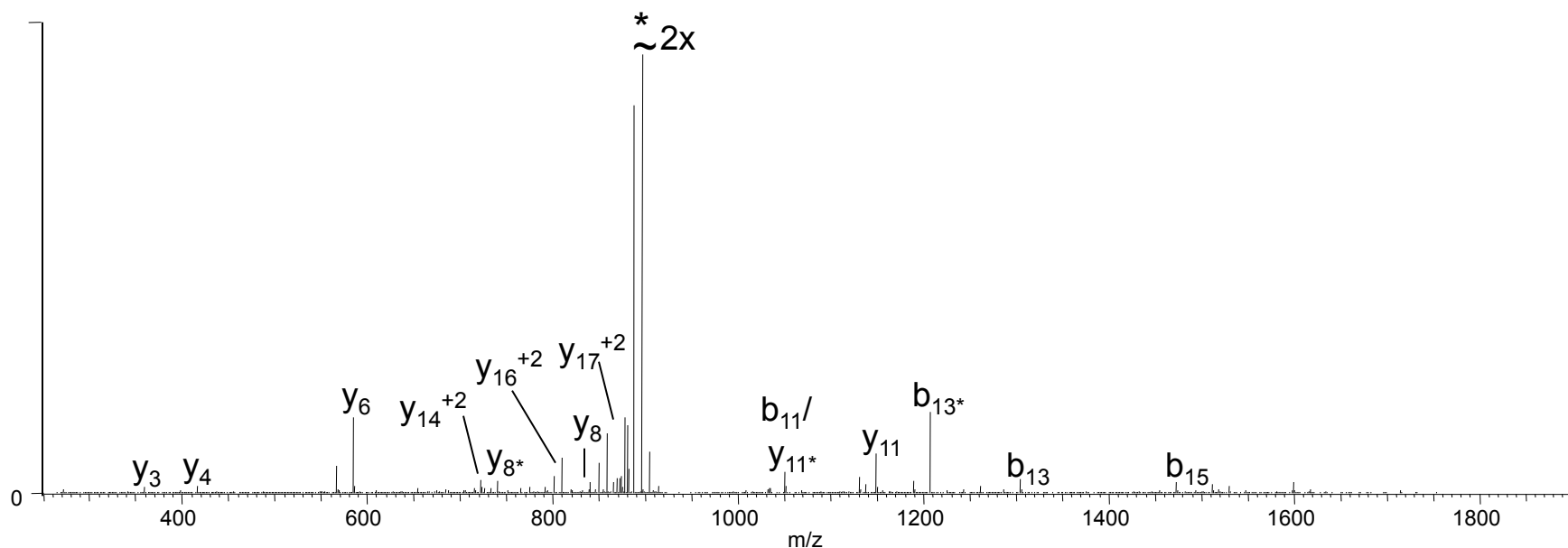
b 72 200 367 480 577 664 779 907 1004 1103 1160 1261 1408 1495 1592 1705 1806 1907 1994 2109 2290 2377 2465 2562 2690 2836  
 A Q pS L P S D Q P V G T F S P L T T S D p(T S S) P Q K  
 2836 2765 2637 2470 2357 2260 2172 2057 1929 1832 1733 1676 1575 1428 1341 1244 1131 1030 929 842 727 546 459 372 275 147 y



### Supplemental Figure S2. Identification of Threonine-326 as a site of phosphorylation.

The amino acid sequence is provided above the spectrum, and the masses above and below the sequence correspond to the theoretical b- and y-type product ions, respectively. The masses provided are the singly-protonated, monoisotopic product ion masses. The observed singly-protonated product ions are underlined. Asterisks indicate ions that result from neutral loss of H<sub>3</sub>PO<sub>4</sub> from fragment ions. Additionally, the presence of the 2<sup>nd</sup> site of phosphorylation is determined due to accurate mass of the peptide, however, the first fragment ion representing this site is located at y<sub>7</sub>, thus the phosphorylation could exist in any of the sites shown in brackets.

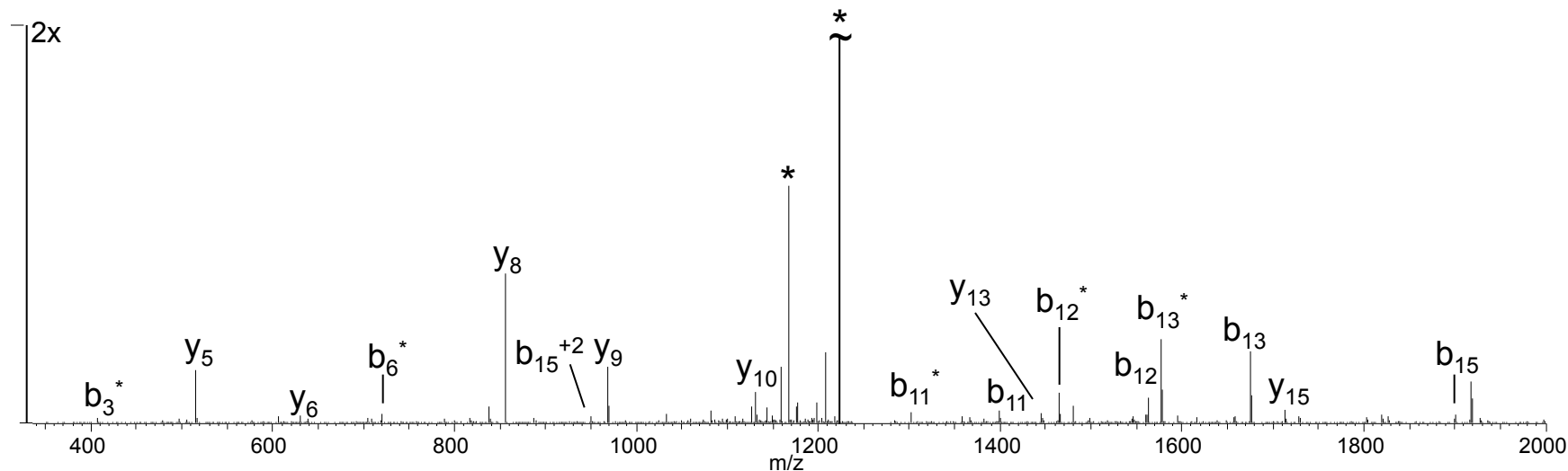
b 102 173 270 341 442 499 627 740 837 894 1050 1137 1304 1401 1472 1529 1616 1713 1888  
 T A P A T G Q L P G R p[S S] P A G S P R  
 1888 1786 1715 1618 1547 1446 1389 1261 1148 1051 994 838 751 584 487 416 359 272 175 y



### Supplemental Figure S3. Identification of Serine-346 as a site of phosphorylation.

The amino acid sequence is provided above the spectrum, and the masses above and below the sequence correspond to the theoretical b- and y-type product ions, respectively. The masses provided are the singly-protonated, monoisotopic product ion masses. The observed singly-protonated product ions are underlined. The site of phosphorylation cannot be definitively identified, due to lack of specific ions related to either site of phosphorylation, however we hypothesize that the phosphorylation is on the first of the serine residues due to lack of tryptic cleavage at the preceding site. Asterisks indicate ions that result from neutral loss of H<sub>3</sub>PO<sub>4</sub>.

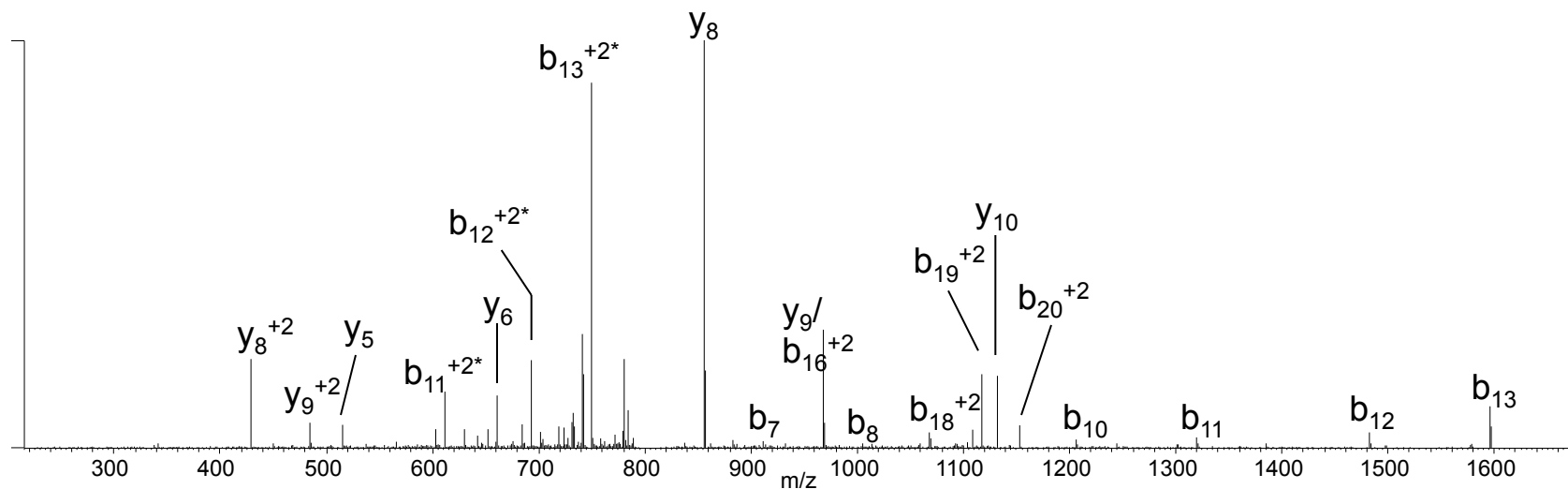
b 182 368 505 576 704 817 984 1085 1172 1286 1399 1562 1675 1772 1900 2015 2112 2213 2312 2384 2530  
 pT W H A Q I pS T S N L Y L P Q D P T V A K  
 2530 2349 2163 2025 1954 1826 1713 1546 1445 1358 1244 1131 968 855 758 630 515 418 317 218 147 y



**Supplemental Figure S4. Identification of Threonine-354 and Serine-360 as sites of phosphorylation.**

The amino acid sequence is provided above the spectrum, and the masses above and below the sequence correspond to the theoretical b- and y-type product ions, respectively. The masses provided are the singly-protonated, monoisotopic product ion masses. The observed singly-protonated product ions are underlined. Asterisks indicate ions that result from neutral loss of H<sub>3</sub>PO<sub>4</sub> from fragment ions. This doubly phosphorylated peptide loses two phosphoric acid groups from the parent ion which are marked with \*.

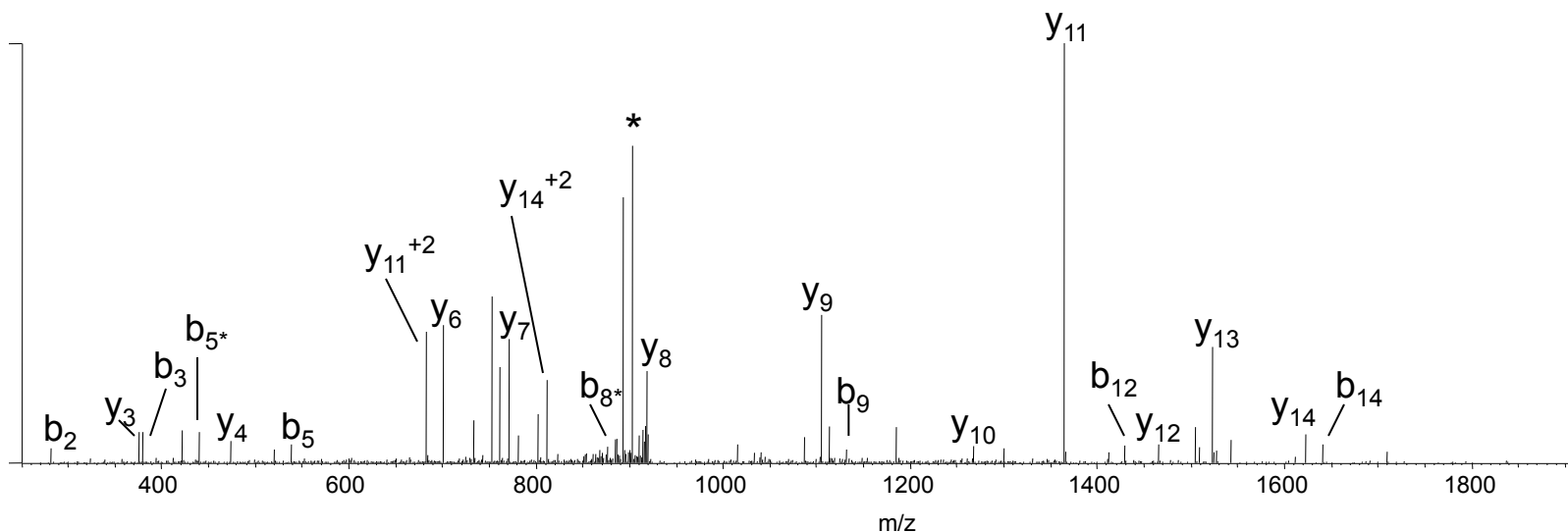
b 102 288 425 496 624 737 904 1005 1092 1206 1319 1482 1595 1692 1820 1935 2032 2133 2233 2304 2450  
 T W H A Q I pS T S N L Y L P Q D P T V A K  
 2450 2349 2163 2025 1954 1826 1713 1546 1445 1358 1244 1131 968 855 758 630 515 418 317 218 147 y



### Supplemental Figure S5. Identification of Serine-360 as a site of phosphorylation.

The amino acid sequence is provided above the spectrum, and the masses above and below the sequence correspond to the theoretical b- and y-type product ions, respectively. The masses provided are the singly-protonated, monoisotopic product ion masses. The observed singly-protonated product ions are underlined. Asterisks indicate ions that result from neutral loss of  $\text{H}_3\text{PO}_4$  from fragment ions.

b 168 281 380 437 538 635 798 984 1131 1202 1299 1428 1527 1640 1727 1902  
 pS L V G T P Y W M(ox) A P E V I S R  
 1902 1734 1621 1522 1465 1364 1267 1104 918 771 700 603 474 375 262 175 y



**Supplemental Figure S6. Identification of Serine560 as a site of phosphorylation.**

The amino acid sequence is provided above the spectrum, and the masses above and below the sequence correspond to the theoretical b- and y-type product ions, respectively. The masses provided are the singly-protonated, monoisotopic product ion masses. The observed singly-protonated product ions are underlined. Asterisks indicate ions that result from neutral loss of H<sub>3</sub>PO<sub>4</sub>.