A screenshot of a graph

Description automatically generated

Fig. 1. Peptidoform proportions across bins. – Placeholder – regenerate at high res.

All proportions are given as a fraction of the total number of peptidoforms that fall within each bin. The total numbers were as follows, from left to right: mz -0.0275 to 0.0225: ;

A. Serine-containing peptidoforms

B

C

D

E

F

A screenshot of a graph

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**Fig. 2. Example histograms of peptidoforms with AUC > 15% in BOI**

**A)** Ribosomal protein S6 kinase alpha-3; False positive peptidoform example

**B)** Sulfotransferase 2A1, Sulfated only example; 1 peptidoform for this protein; potential novel info on sulfation

**C)** Vitronectin, known sY protein: Doubly or singly sulfated peptide; total of 10 peptidoforms of Vitronectin found in BOI and bin -1; 2 peptides (and incl shortened versions of 1), both of which contain known sY residues

**D)** Osteopontin – secreted; Mostly sulfo, some phospho PSMs; 5 peptidoforms derived from 2 peptides; potential novel sulfation

**E) Calumenin – potential novel sulfation**

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**Fig. 3. GO term Overrepresentation Analysis Results**

**Bins IDs are in rows and the type of analysis in columns (MF = Molecular Function, BP = Biological Process, CC = Cellular Component)**

**NB: make into a Table format figure similar to Emily’s?**

A screenshot of a graph

Description automatically generated

**Fig. 4. Custom Terms Overrepresentation Analysis Results**

**Bins IDs are in rows and the type of analysis in columns (MF = Molecular Function, BP = Biological Process, CC = Cellular Component)**