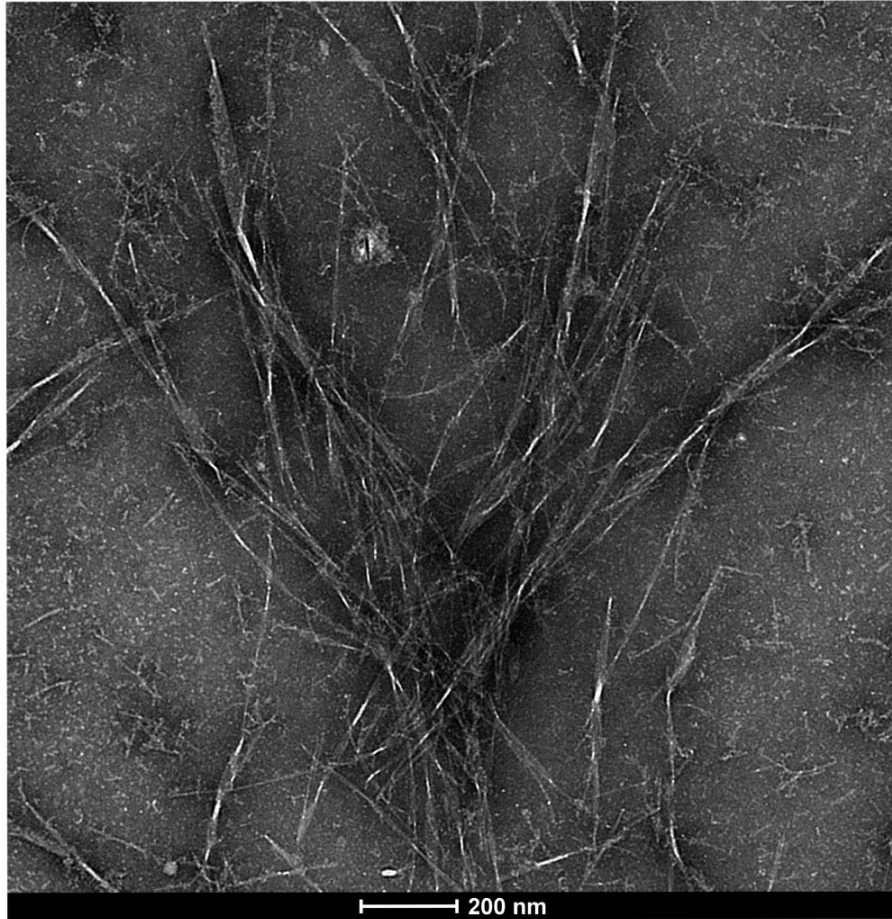
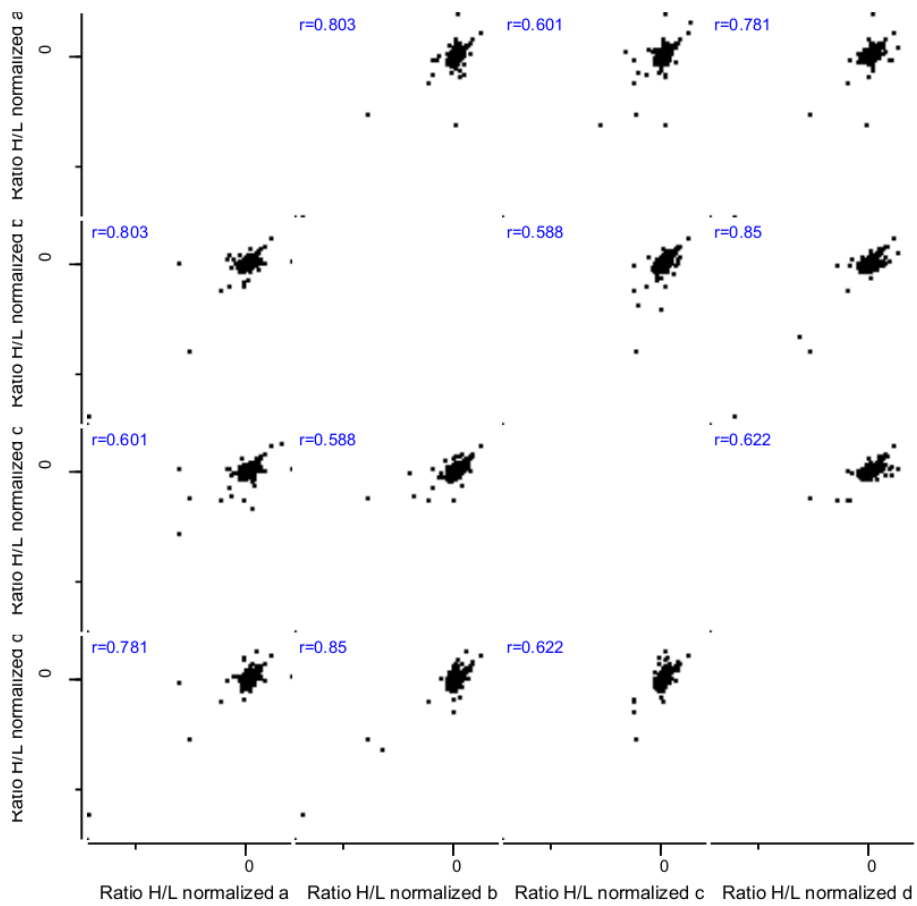


**Supplementary Figure 1: The electron microscopy structure of fibrillar A $\beta$**



Followed by A $\beta$  incubation (1 mM) for 24 h at 37°C, 5  $\mu$ l A $\beta$  (1 mg/ml) were added to 300-mesh copper grids with carbon support film, then the samples were stained with 2% phosphotungstic acid, and the grids were analysed by transmission electron microscopy at 120kV (Tecnai G<sup>2</sup> 20, Hong Kong).

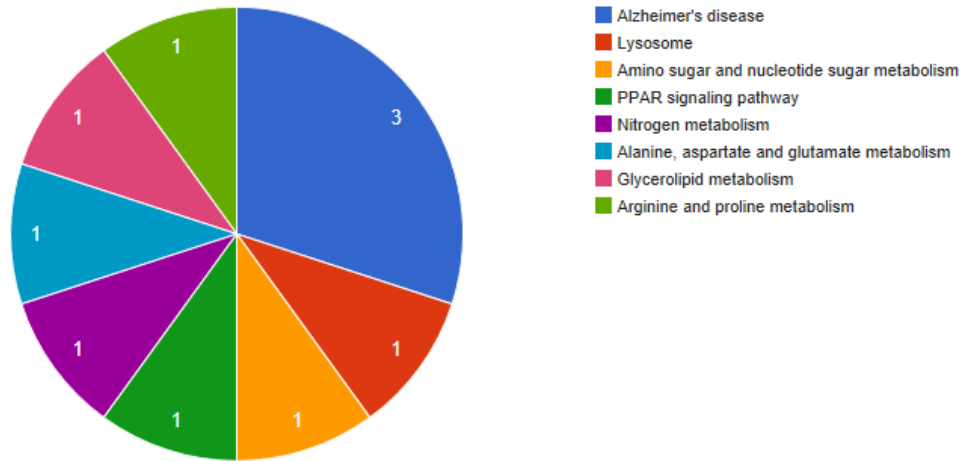
**Supplementary Figure 2: Reproducibility across biological replicates**



The reproducibility of SILAC quantification of the biological replicates is illustrated by the protein ratio correlations.

### Supplemental Figure 3

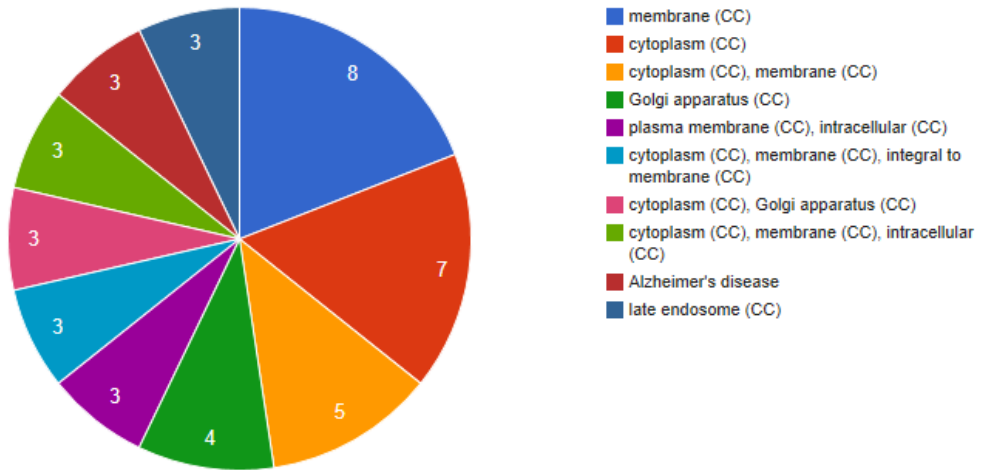
Number of genes per annotation



KEGG pathway analysis of 13 differentially expressed proteins using GeneCodis 3.

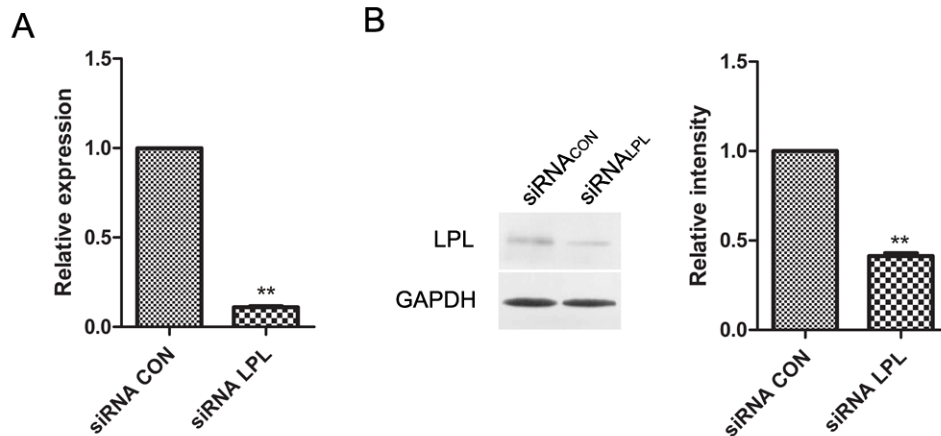
## Supplemental Figure 4

Number of genes per concurrent annotations



GO Cellular Component analysis of 13 differentially expressed proteins using GeneCodis 3.

**Supplementary Figure 5: The inhibition efficiency of LPL knockdown**



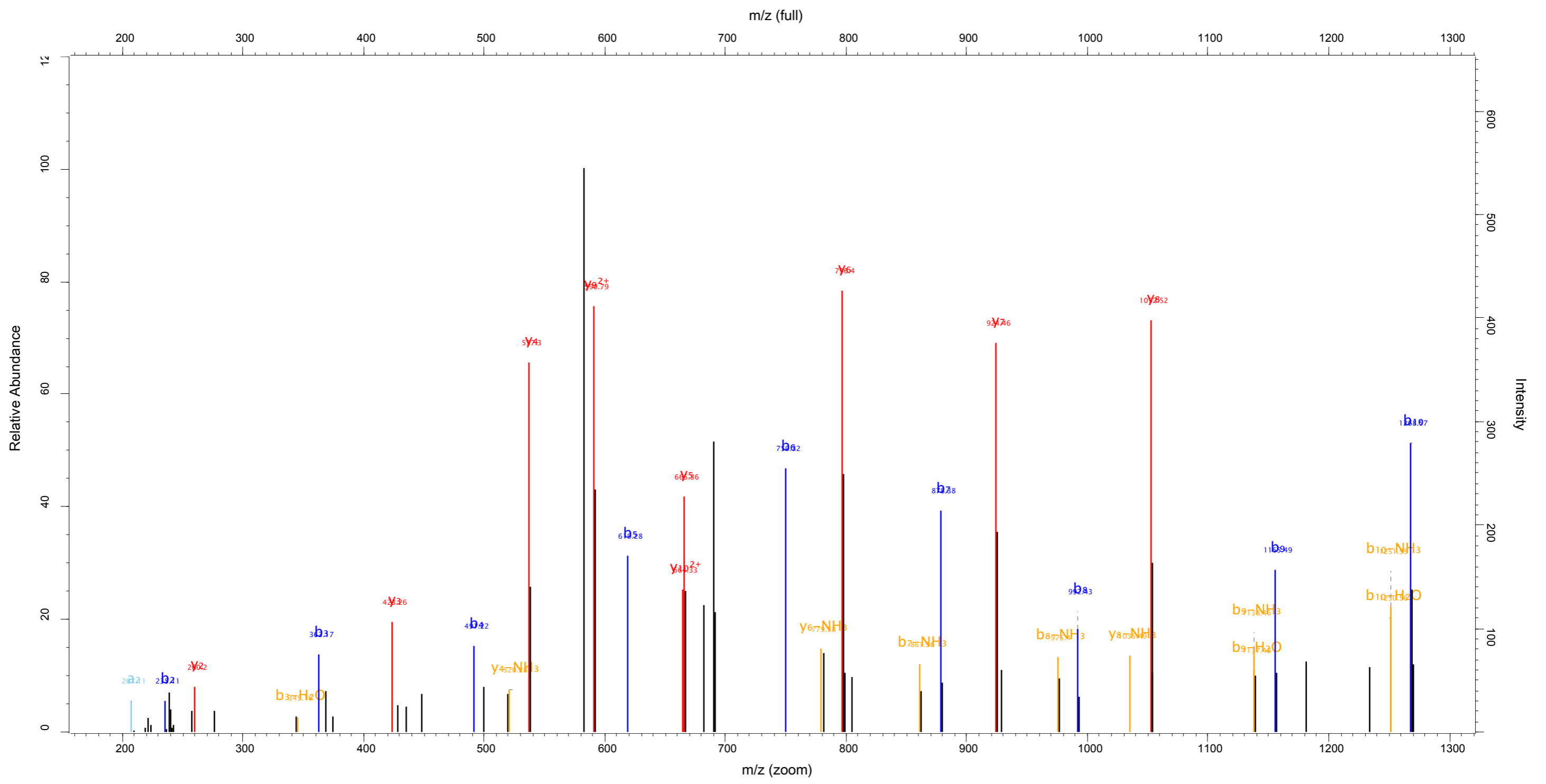
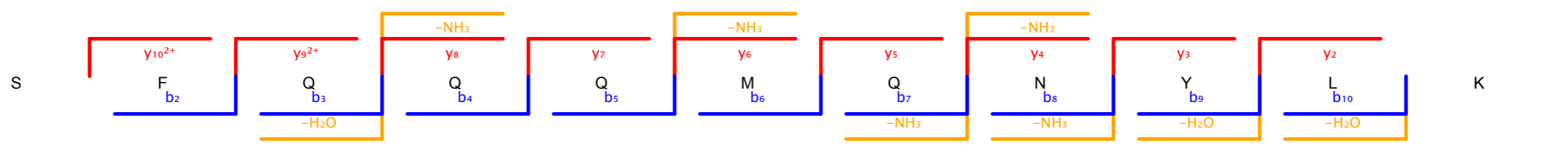
BV2 cells were transfected with 10 nM siRNA specific for LPL (siRNA<sub>LPL</sub>) and control siRNA (siRNA<sub>CON</sub>) for 36 h.

*A*: The mRNA of the cells were extracted by Trizol reagent as the provided standard protocol. Quantitative PCR (qPCR) of LPL was executed using these cDNA reverse-transcribed by mRNA. LPL mRNA level examined showed significant changes after knock-down. *B*: The cells were washed in cold PBS three times, harvested using 4% SDS lysis buffer. The bands of Western blotting were analysed by Image J, and the relative gray-scale was presented by the bar. (\*\* $p < 0.01$ ; comparison against control siRNA teams, two-tailed t test.). Bars, means  $\pm$ S.D. (n= 3).

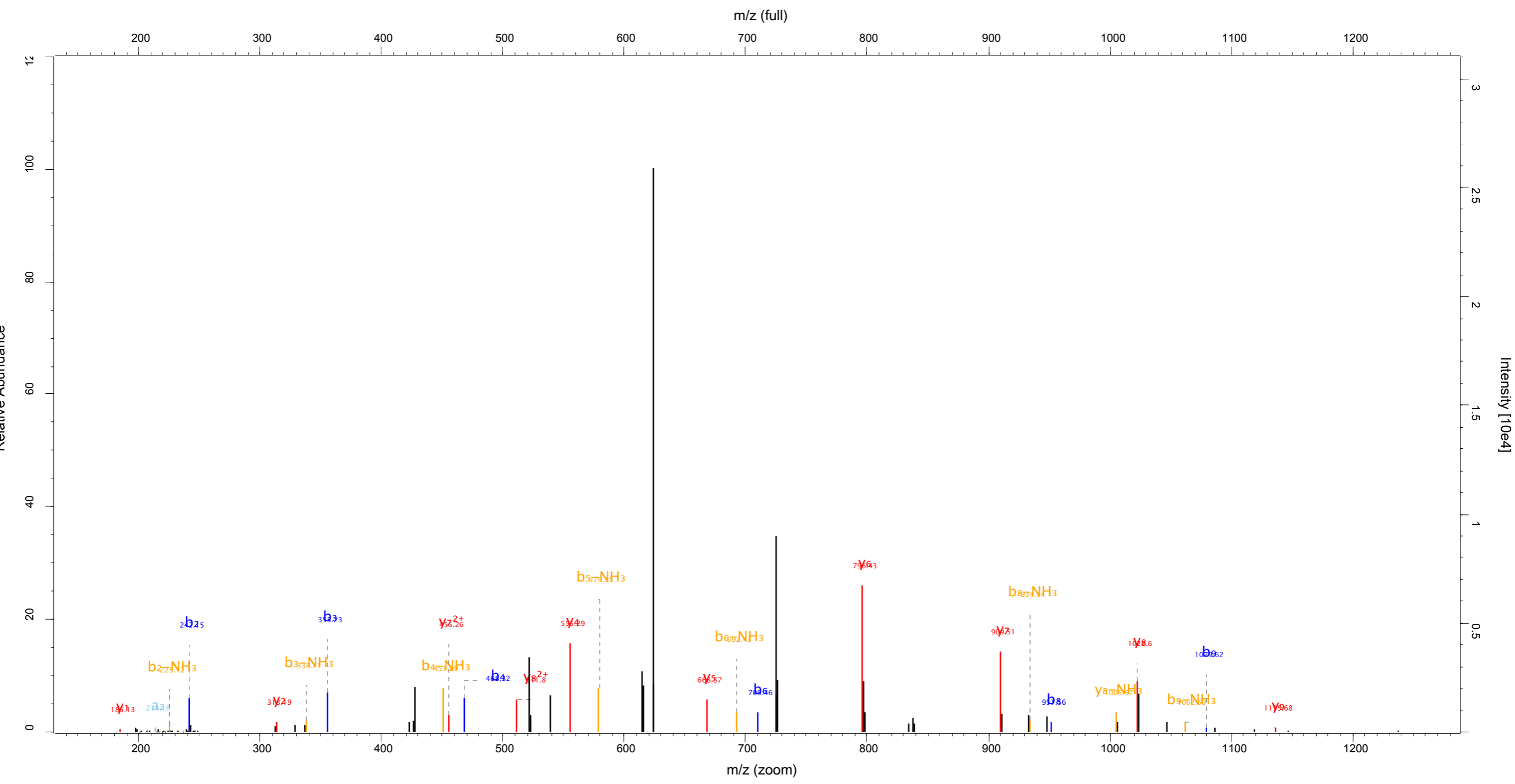
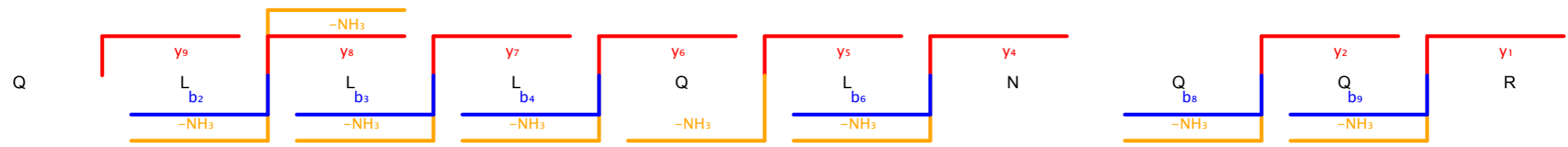
## **Supplemental Figure 6**

Among 13 significantly altered proteins detected in our SILAC quantitation results, 5 proteins were found to be single peptide identification (Trim23, CD63, HIC2, Slc6a17, and Slc23a3). The annotated spectra are provided for these 5 proteins as below:

Scan number 6385 Raw file 2\_19  
 Method ITMS; CID Genenames Cd63

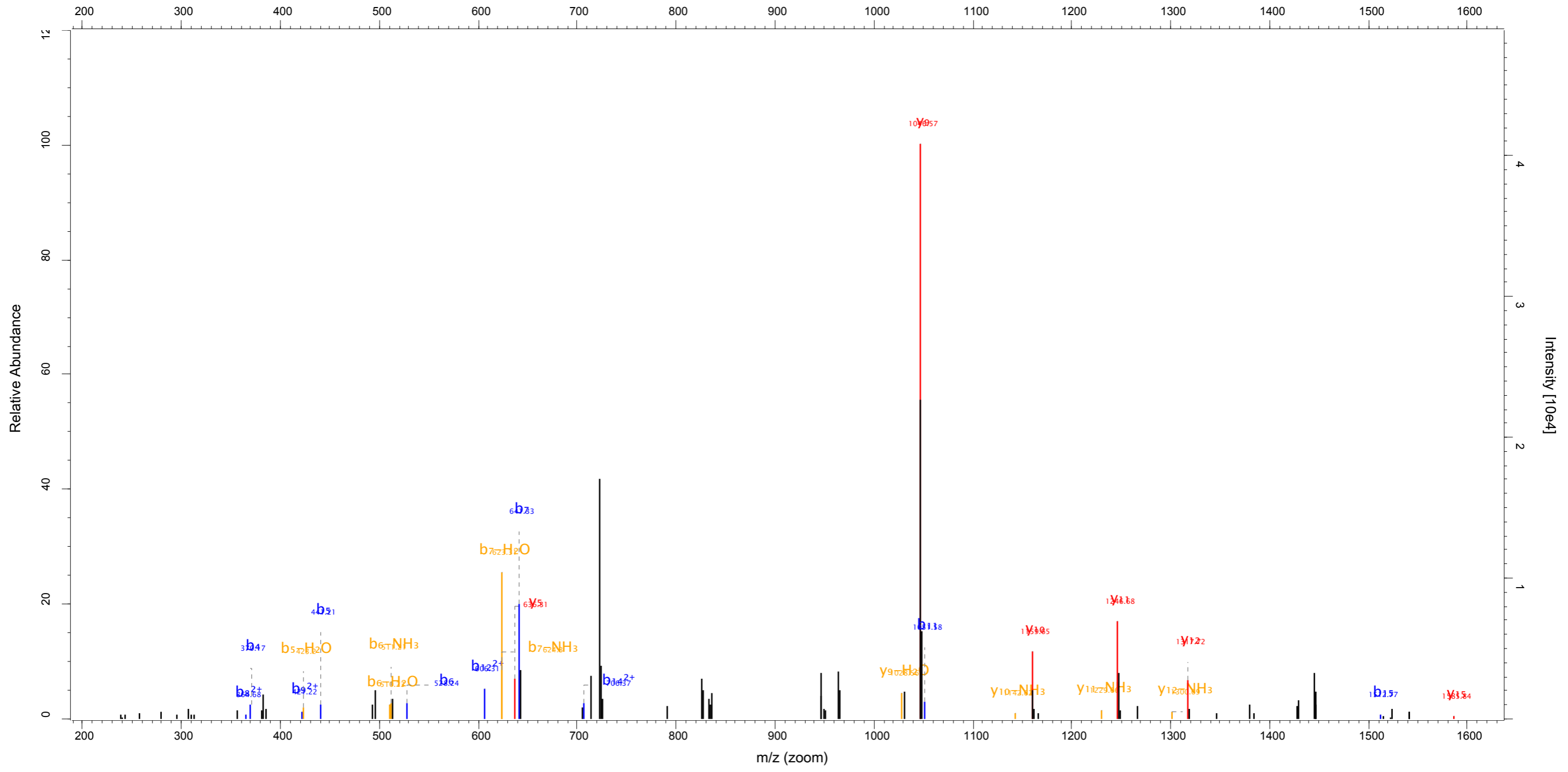
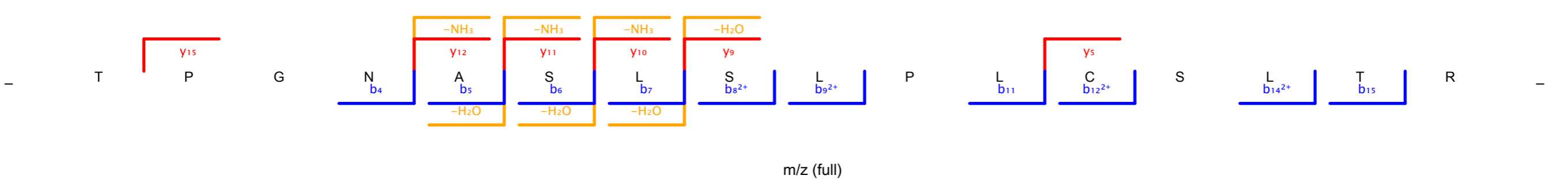


Scan number 5741 Raw file 4\_21  
 Method ITMS; CID Genenames Hic2

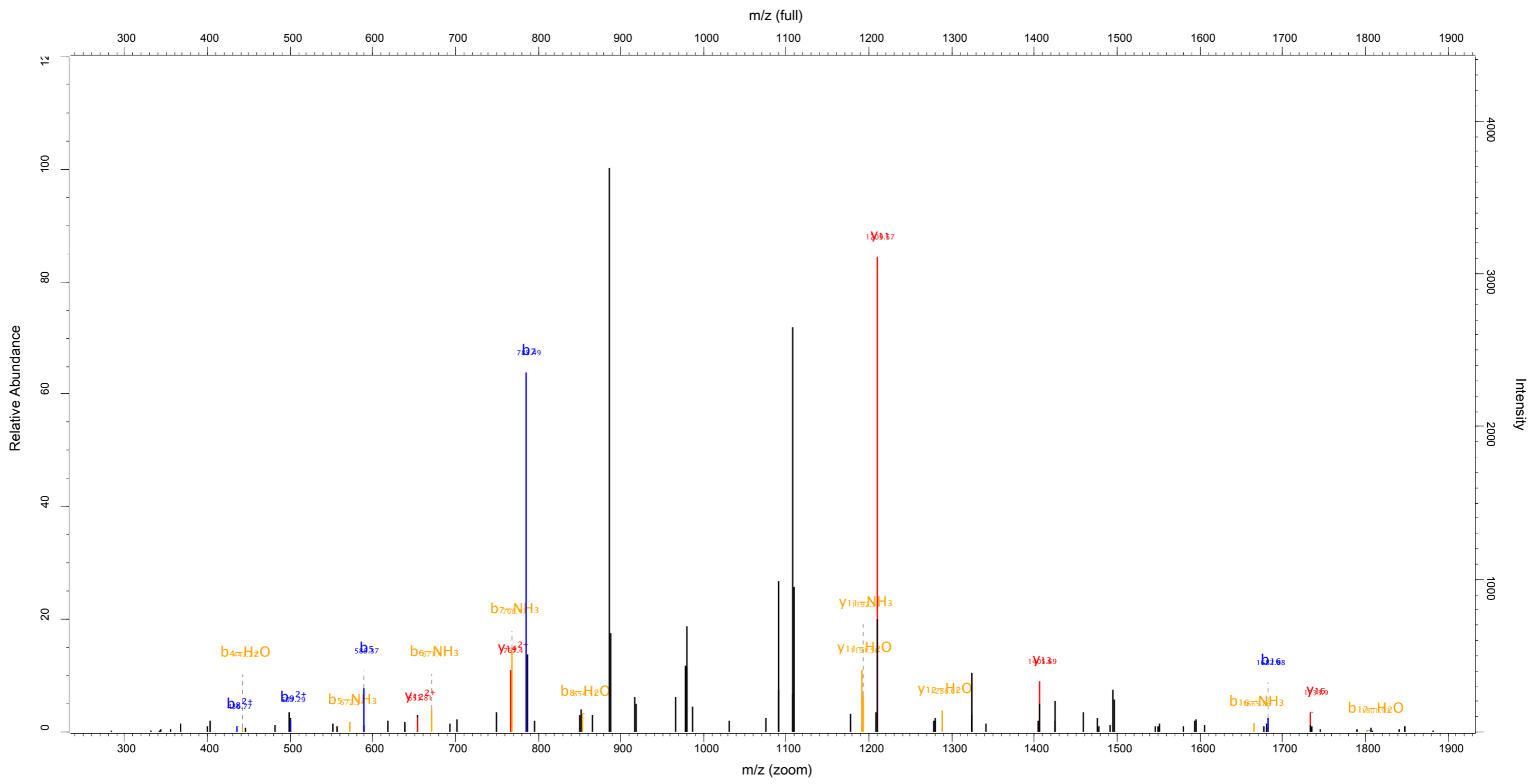
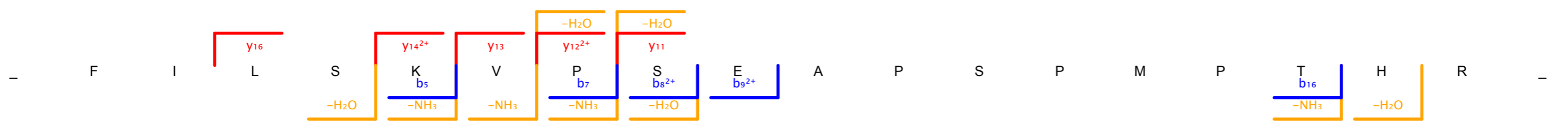




Scan number 5743 Raw file 2\_20  
 Method ITMS; CID Genenames Slc23a3



Scan number 6299 Raw file L\_03  
 Method ITMS; CID Genenames Slc6a17



Scan number 8134 Raw file 3\_06  
Method ITMS; CID Genenames Trim23

