

Supplementary Material for  
Structural Analysis of the Homodimeric Reaction Center  
Complex from the Photosynthetic Green Sulfur Bacterium  
*Chlorobaculum tepidum*

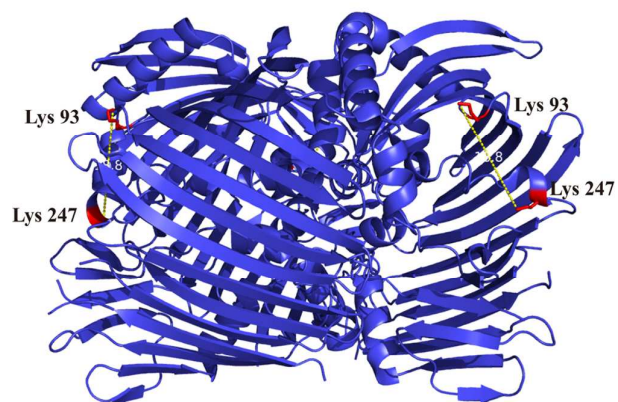
Guannan He<sup>1</sup>, Hao Zhang<sup>1</sup>, Jeremy D. King<sup>2</sup>, Robert E. Blankenship<sup>1,2\*</sup>

<sup>1</sup>Department of Chemistry, Washington University in St Louis, St Louis, MO, 63130

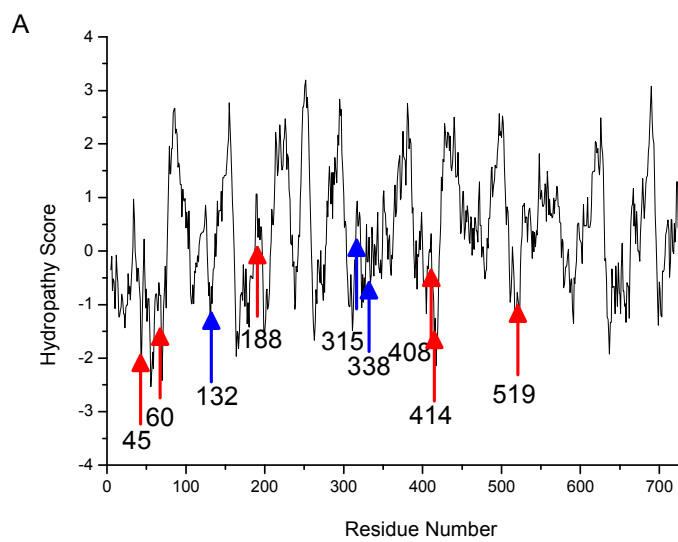
<sup>2</sup>Department of Biology, Washington University in St Louis, St Louis, MO, 63130  
AUTHOR  
INFORMATION

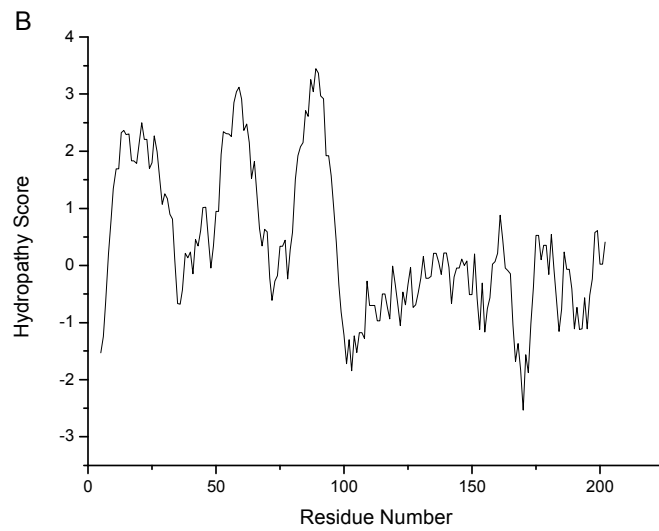
**Corresponding Author**

\*Tel: (314) 935-7971. Fax: (314) 935-4432. E-mail: [blankenship@wustl.edu](mailto:blankenship@wustl.edu).

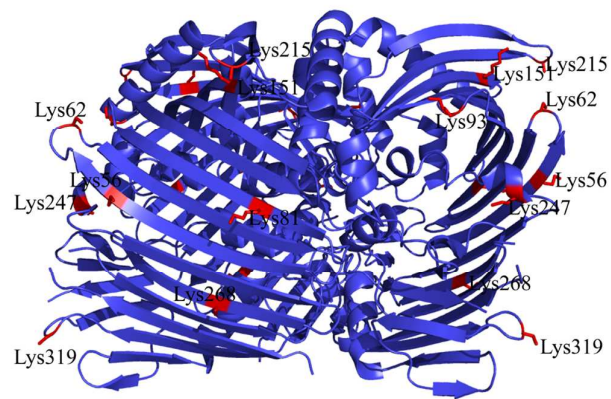


**Figure S1.** The intra-linked lysines <sup>93</sup>K and <sup>247</sup>K in the crystal structure of the FMO trimer and the distance between them is 18.8 Å

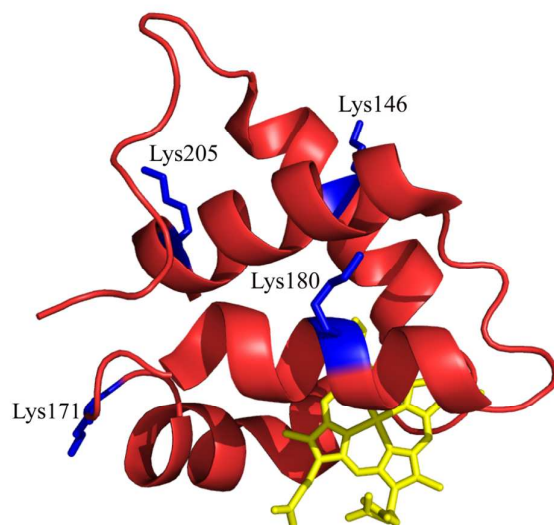




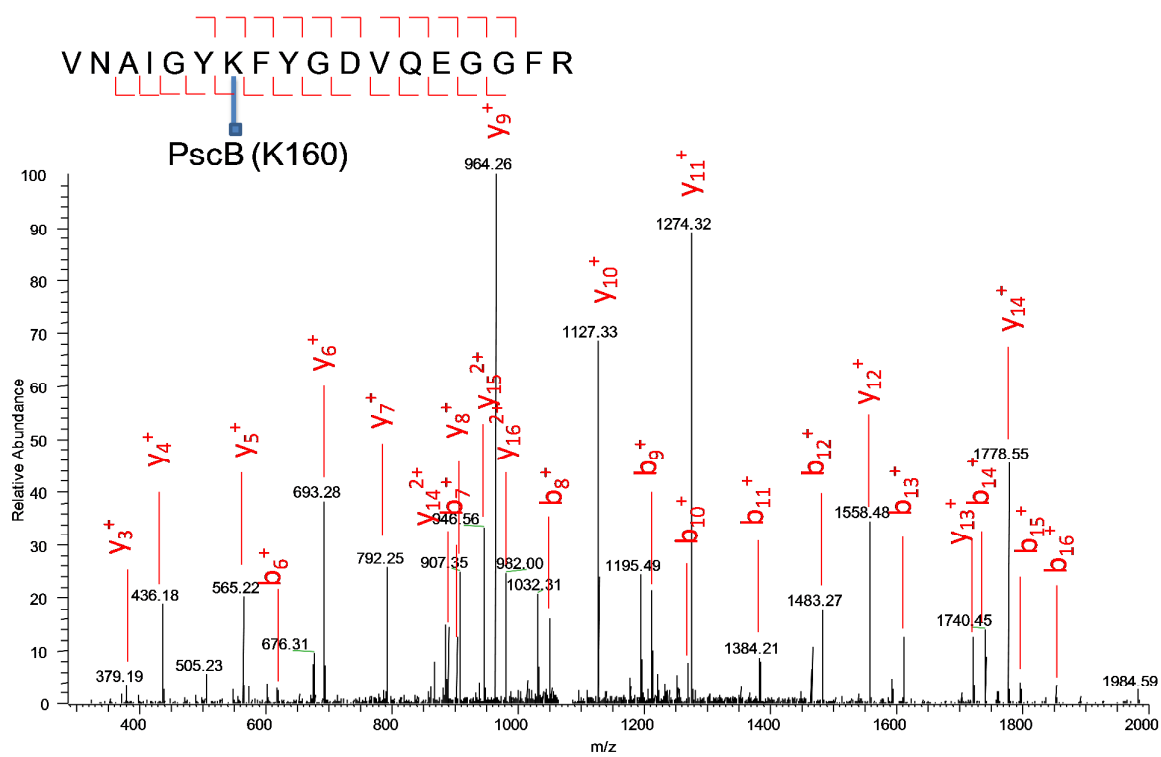
**Figure S2.** Hydropathy plots of (A) PscA (linked lysines in the cytoplasmic (red arrows) and periplasmic (blue arrows) side of the membrane) and (B) PscC



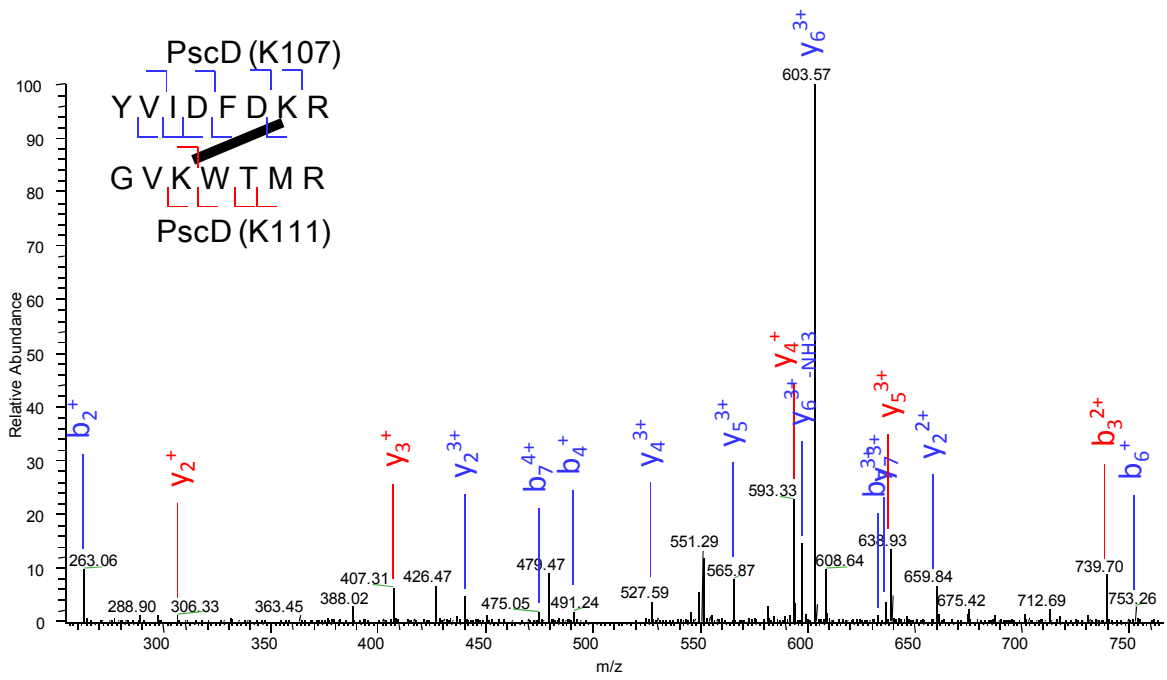
**Figure S3.** The mono-linked lysines of FMO



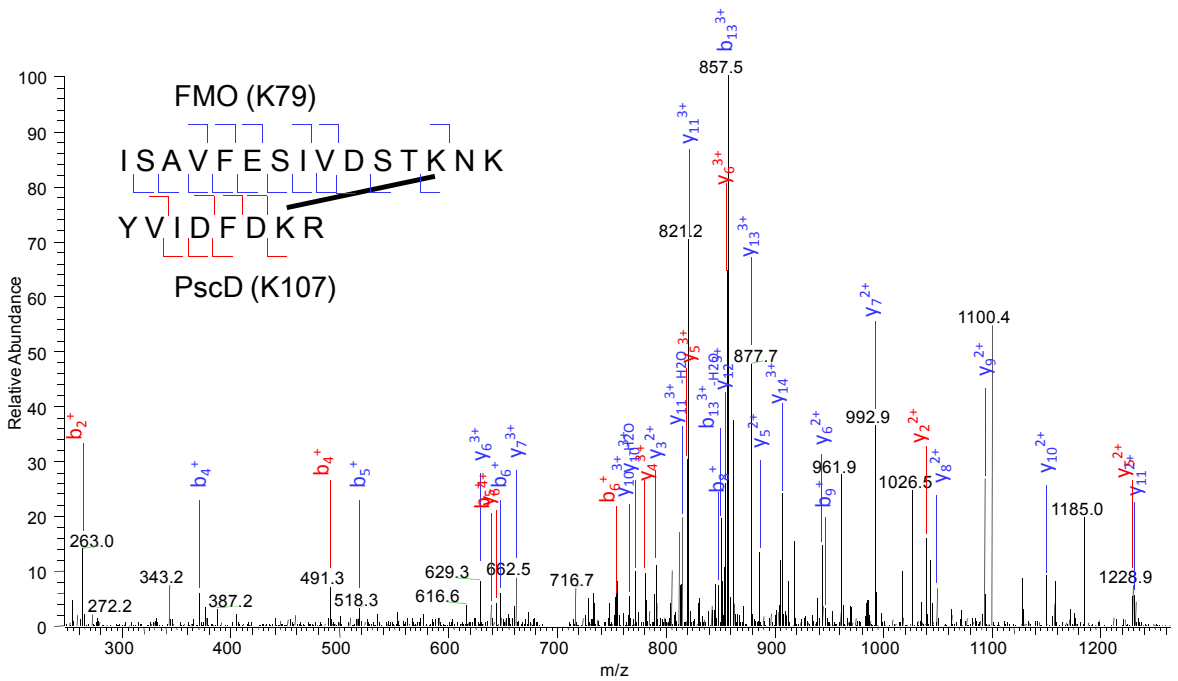
**Figure S4.** The mono-linked lysines of soluble domain of PscC

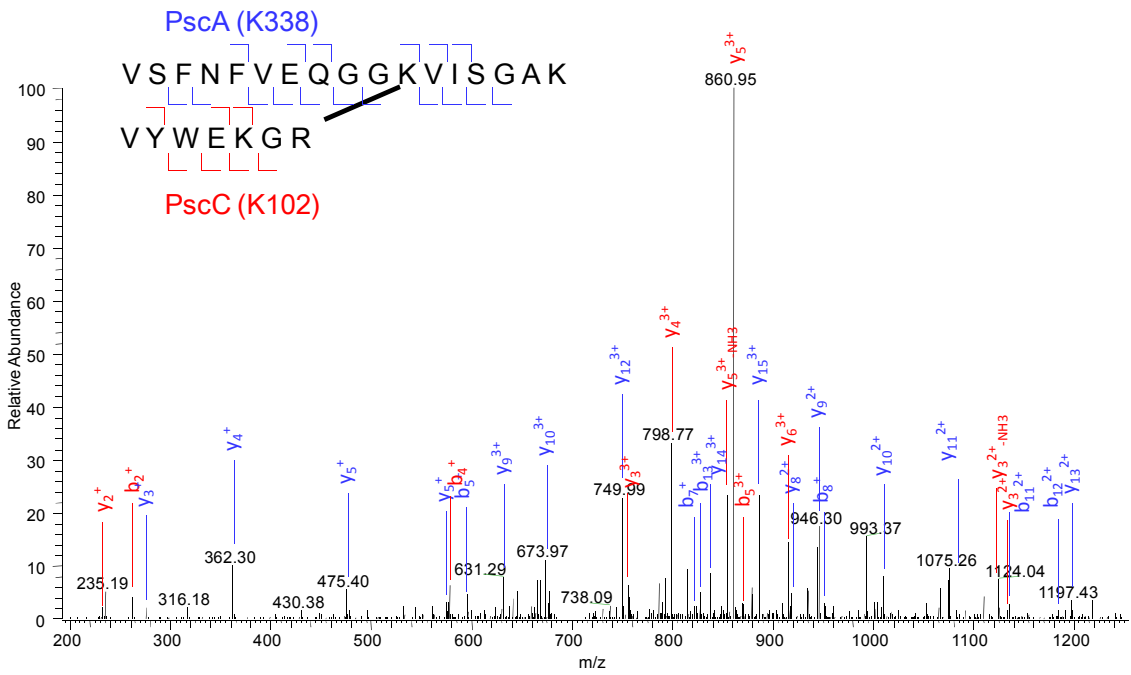
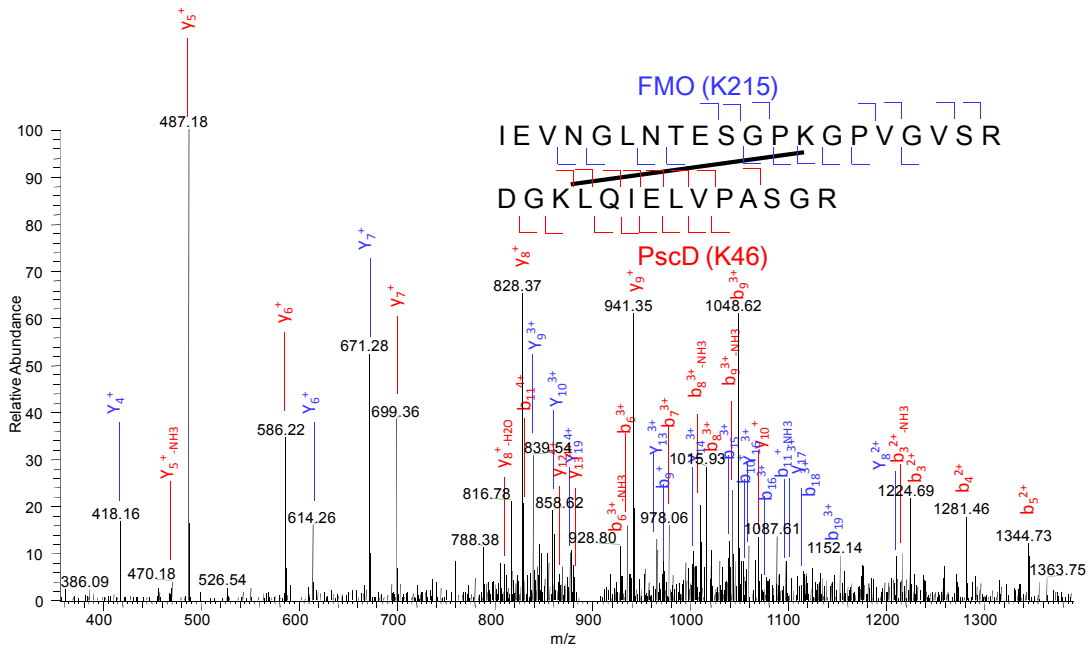


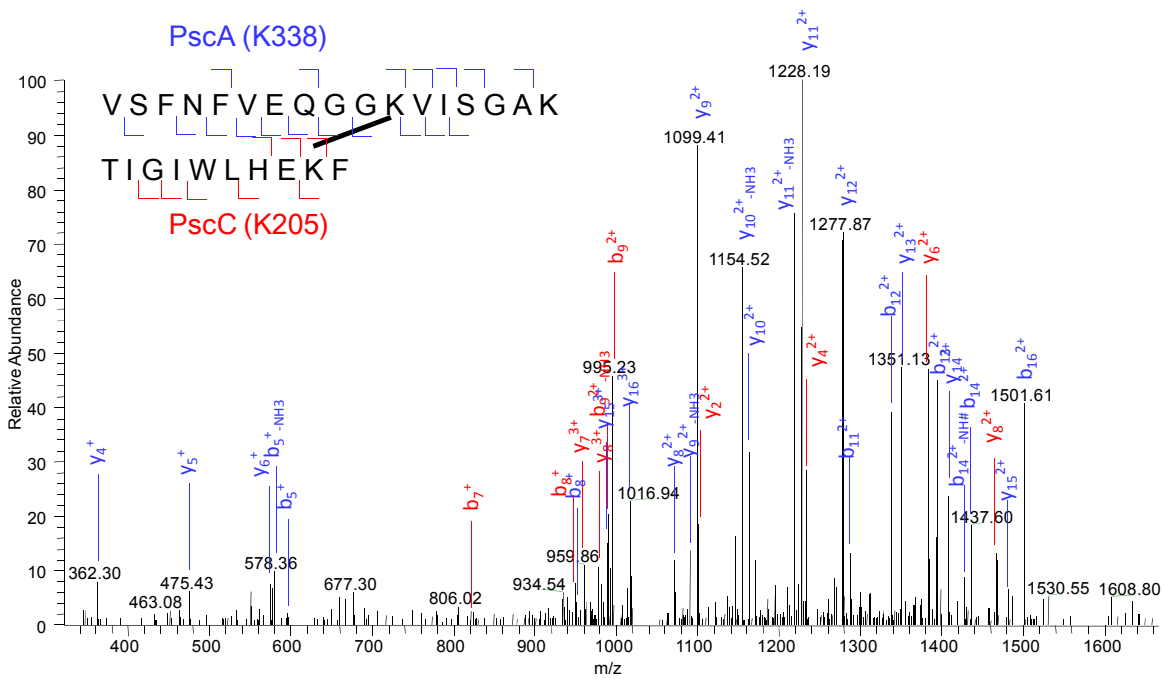
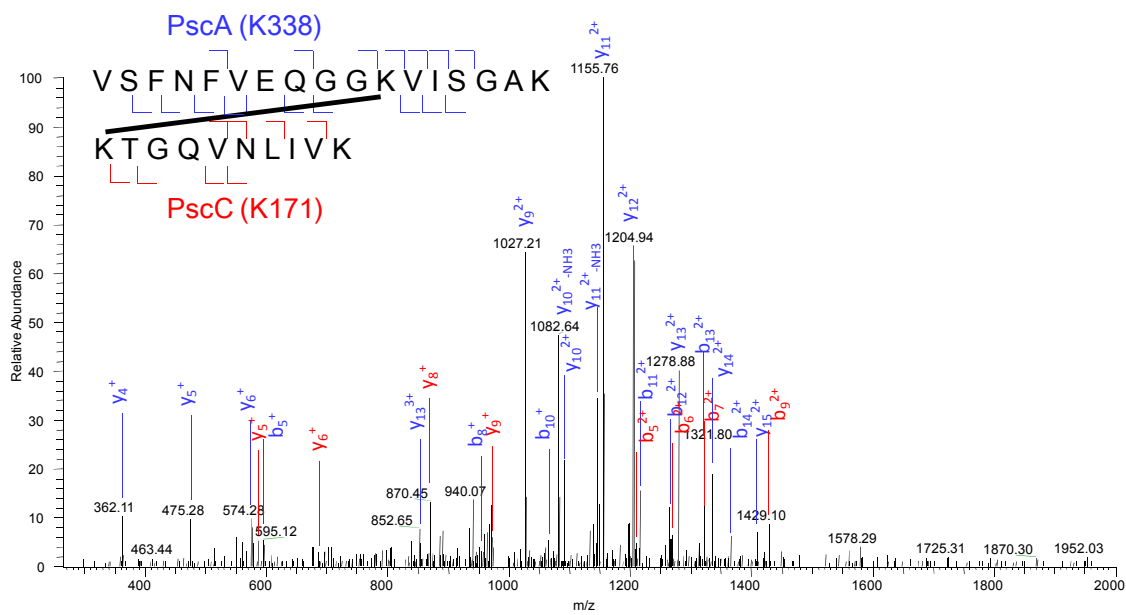
**Figure S5.** The MS/MS spectra of the mono-linked peptide of PscB (K160)



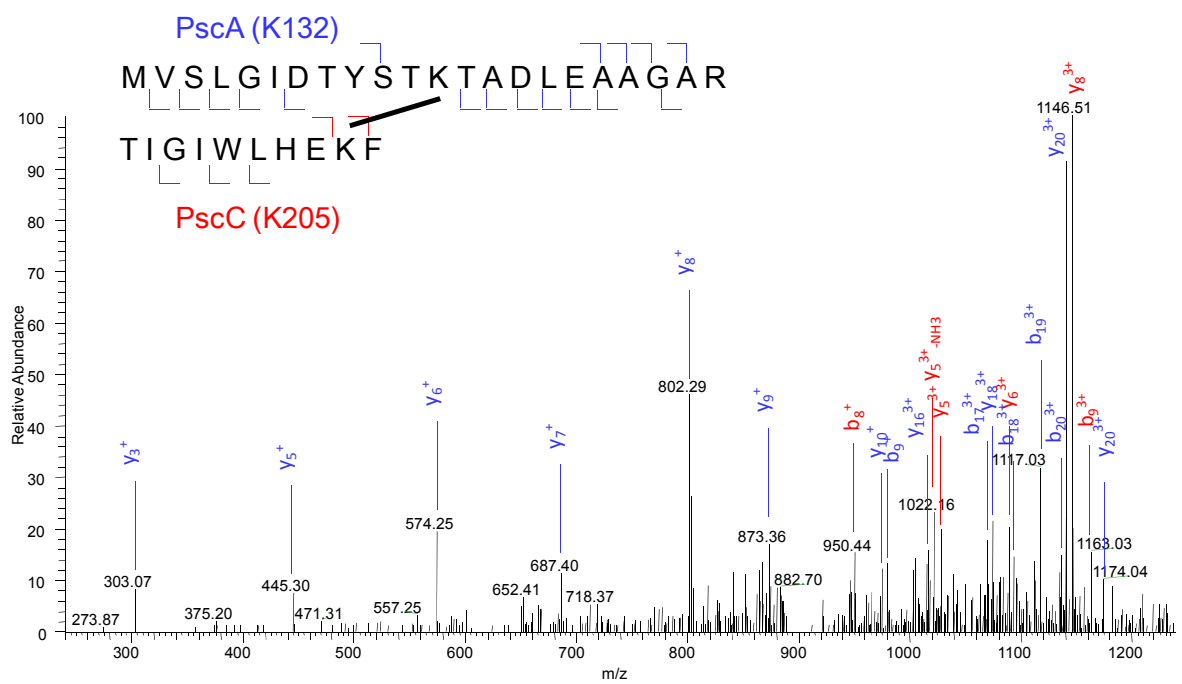
**Figure S6.** The MS/MS spectra of the intra-linked peptide between PscD K107 and K111







**Figure S7.** The MS/MS spectra of the confirmed cross-linked peptides



**Figure S8.** The MS/MS spectrum of the likely cross-linked peptides