

(SUPPLEMENTAL MATERIAL)

# Salt-mediated organic solvent precipitation for enhanced recovery of peptides generated by pepsin digestion

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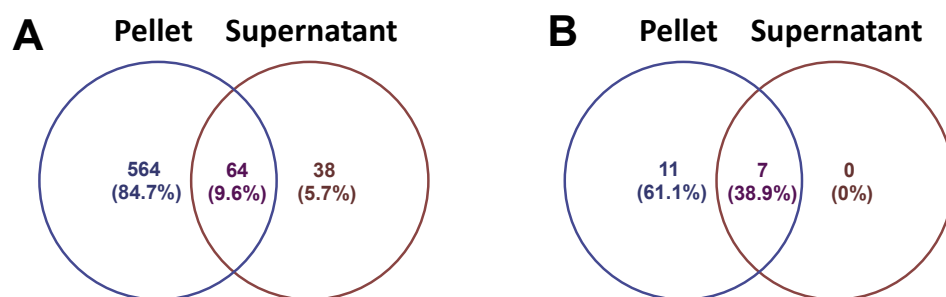
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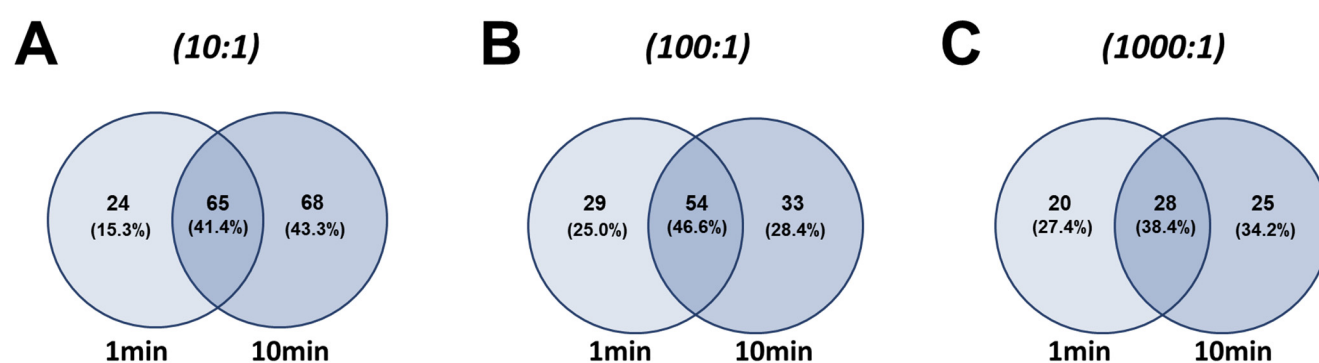
## (additional files)

*\* tables are presented as individual worksheets within the excel files*

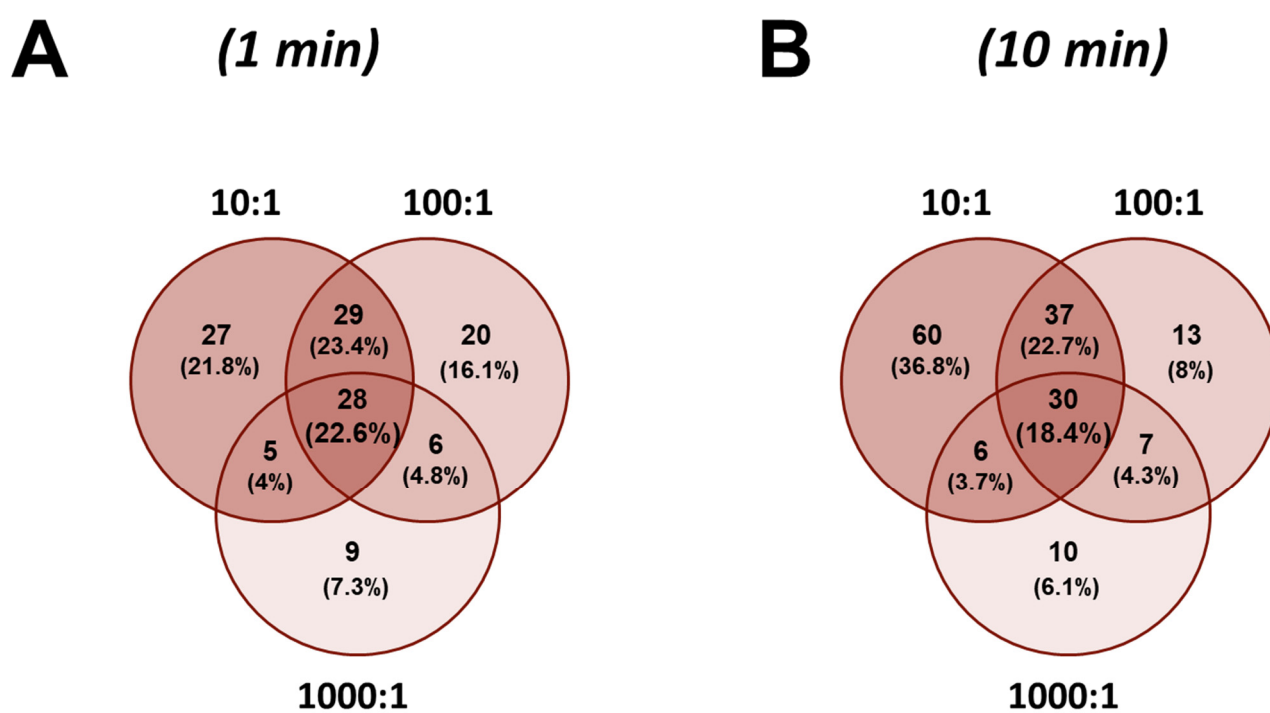
- Table S1\_S2.xls: List of peptides and proteins identified in the pellet (S1) and supernatant (S2) following salt-mediated solvent precipitation of pepsin-digested protein mixture
- Table S3\_S4.xls: List of peptides and proteins identified in the pellet (S3) and supernatant (S4) following salt-mediated solvent precipitation of pepsin-digested yeast sample
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- Table S24: precipitated peptides identified in pellet fraction lacking one or more specific residues



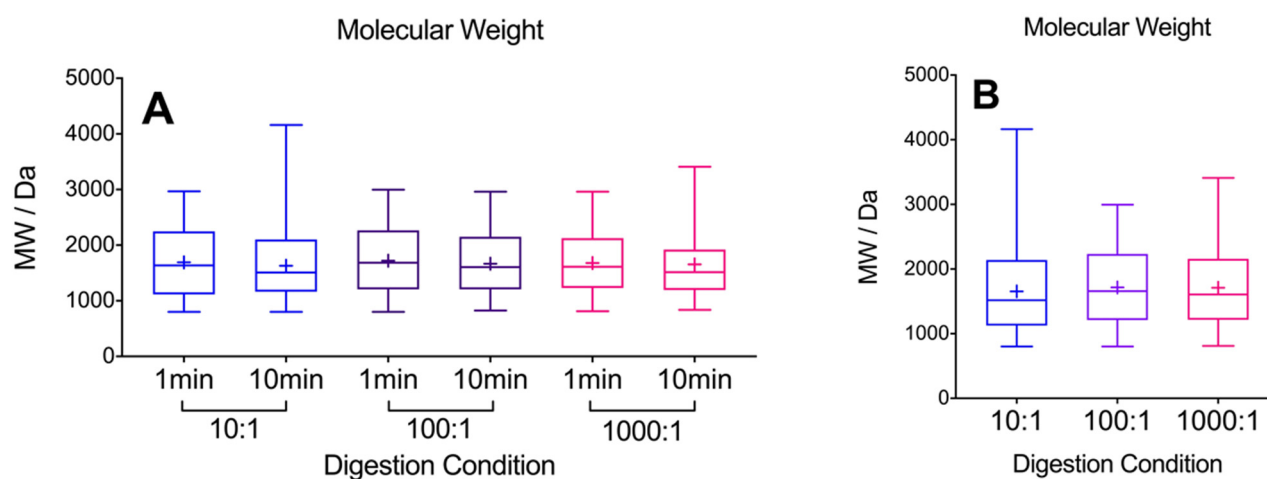
**Figure S1.** Venn diagram summarizing the proteins identified from bottom-up MS analysis of the pellet and supernatant fractions of (A) yeast and (B) bovine plasma, following peptide precipitation with the optimized protocol.



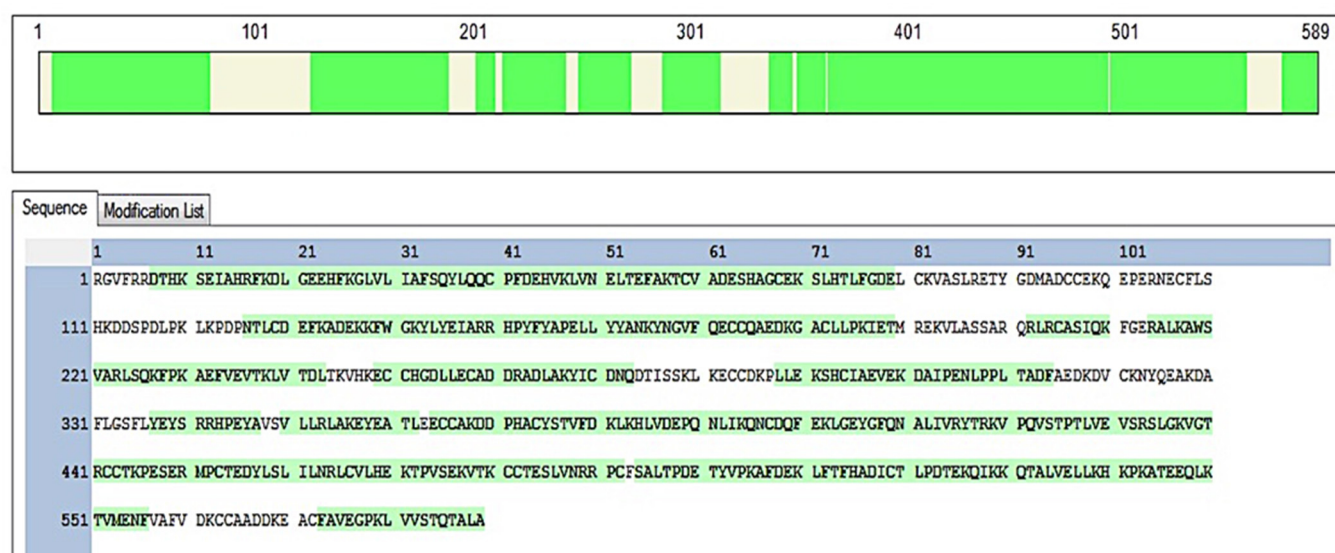
**Figure S2.** Venn diagrams compare the peptides identified by MS in the pellet fraction following precipitation of BSA, digested with pepsin at various ratios of protein to enzyme: (a) 10:1 protein to enzyme ratio; (b) 100:1 ratio; (c) 1000:1 ratio.



**Figure S3.** Venn diagrams compare the peptides identified in the pellet fraction following precipitation of BSA, digested with pepsin at various ratios of protein to enzyme for different digestion times: (a) 1 min digestion; (b) 10 min digestion.



**Figure S4.** A comparison of the molecular weight distribution of peptides identified by MS following pepsin digestion for specific time (1 vs 10 min) and at different ratios of protein to enzyme (10:1, 100:1, 1000:1). (a) Shows that longer digestion times, or more enzyme, relative to protein, yields smaller peptides. (b) Summarizes the aggregated set of peptides recovered under the three different ratios of protein to enzyme.



**Figure S5.** Aggregated sequence coverage obtained from MS analysis of pepsin-digested BSA, with peptides recovered through salt-mediated solvent precipitation.