## Supplemental data table 7S: Source of raw files

Origin of raw files for the construction of raw spectral libraries.

| Origin of raw files for the construct                                  |   | number of |
|--|---|-----------|
| cultivation  | sample preparation  | raw files |
| wild type, stress condition: 48 °C wild type, stress condition: 0.3 mM | cytosolic fraction, enriched membrane fraction                              | 20        |
| BIP wild type, stress condition: 10 mM                                 | cytosolic fraction, enriched membrane fraction                              | 21        |
| H <sub>2</sub> O <sub>2</sub>  | cytosolic fraction, enriched membrane fraction                              | 32        |
| wild type, stress condition: 0.1 mM methylviologen                     | cytosolic fraction, enriched membrane fraction                              | 20        |
| wild type, stress condition: 2 mM  TMAD                                | cytosolic fraction, enriched membrane fraction                              | 21        |
| wild type, stress conditions: 8%  NaCl  wild type, chemical defined    | cytosolic fraction, enriched membrane fraction                              | 21        |
| medium, stress condition: glucose limitation (0.05% glucose)           | cytosolic fraction, enriched membrane fraction                              | 19        |
| wild type, chemical defined<br>medium                                  | cytosolic fraction, enriched membrane fraction, extracellular fraction      | 22        |
| Δ <i>ptpB</i> , chemical defined medium                                | phosphoenrichment fractions   | 34        |
| wild type, stationary growth phase                                     | cytosolic fraction, enriched membrane fraction, extracellular fraction      | 22        |
| wild type, late stationary growth phase                                | cytosolic fraction, enriched membrane fraction, extracellular fraction      | 25        |
| wild type, exponential growth phase                                    | cytosolic fraction, enriched membrane fraction, phosphoenrichment fractions | 330       |
| Δ <i>ptpB</i> , exponential growth phase                               | phosphoenrichment fractions   | 410       |
| synthetic arginine phosphorylated peptides                             |   | 98        |