



Figure S3: Proteomics data for halophilic archaea in osmotic stress experiments. For completeness, data for both hyperosmotic (circles) and hypoosmotic (squares) experiments, which are reported together in the proteomics studies, are shown here, but only hyperosmotic stress data are used in the manuscript. The plots show median differences of compositional metrics, GRAVY, and pI for the differentially expressed proteins, i.e. median value for all up-regulated proteins minus median value for all down-regulated proteins in each dataset. Data sources, indicated by letters, are described in the following table and footnotes. Reference keys in the table, derived from the first letters of the authors' surnames and publication year, correspond to file names used for the datasets in the canprot package.

Set	Reference	Description	Down	Up
a	LRB+09	<i>Halobacterium salinarum</i> 2.6 M / 4.3 M NaCl	105	62
b	LRB+09	<i>Halobacterium salinarum</i> 5.1 M / 4.3 M NaCl	74	64
c	ZLZ+16	<i>Nocardiopsis xinjiangensis</i> 6% / 10% NaCl	146	131
d	ZLZ+16	<i>Nocardiopsis xinjiangensis</i> 17.5% / 10% NaCl	57	82
e	LLYL17	<i>Tetragenococcus halophilus</i> 0 M / 1 M NaCl	47	131
f	LLYL17	<i>Tetragenococcus halophilus</i> 3.5 M / 1 M NaCl	92	39
g	JSP+19	<i>Haloferax volcanii</i> 10.8% / 15% NaCl	278	109
h	JSP+19	<i>Haloferax volcanii</i> 19.2% / 15% NaCl	337	159

a. b. Tables 1 and 2 of Leuko et al. (2009). **c. d.** Table S-1 of Zhang et al. (2016). Values of reporter intensities at each condition (6%, 10%, and 17.5% NaCl) were quantile normalized (R function preprocess-Core::normalize.quantiles); normalized values were used to compute intensity ratios (6% / 10% NaCl and 17.5% / 10% NaCl). Only proteins with expression ratios > 1.3 in either direction (Zhang et al., 2016), p-values < 0.05, and at least 2 peptides were included. **e. f.** Tables S2 and S3 of Lin et al. (2017). **g. h.** Supporting Table 1C of Jevtić et al. (2019). Only proteins with at least 2-fold expression difference and marked as significant were included.

References

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