

**Additional file 3:** Gene set overlap of *Salmonella* Typhimurium and *Salmonella* Choleraesuis gene sets in PorSignDB. In order to see whether Typhimurium could be discriminated from Choleraesuis gene sets, overlap of genes was calculated using a hypergeometric test with Benjamini-Hochberg (BH) adjusted p-values.

0.05