SUPPLEMENTAL INFORMATION

Biologically Active Isoforms of CobB Sirtuin Deacetylase in *Salmonella enterica* and *Erwinia amylovora*

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Running title: bacterial sirtuins isoforms

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SUPPLEMENTAL FIGURES

Figure S1. *S. enterica* synthesizes two isoforms of CobB. A. Western blot analysis performed using rabbit αCobB antiserum on whole-cell lysates of wild type and *ΔcobB* strains grown on NB or minimal medium supplemented with glucose, glycerol, citrate, or acetate (50 mM) to mid-log phase. Purified *Se*CobB$_L$ (31.1 kDa) and *Se*CobB$_S$ (26.2 kDa) proteins were included as molecular weight standards.

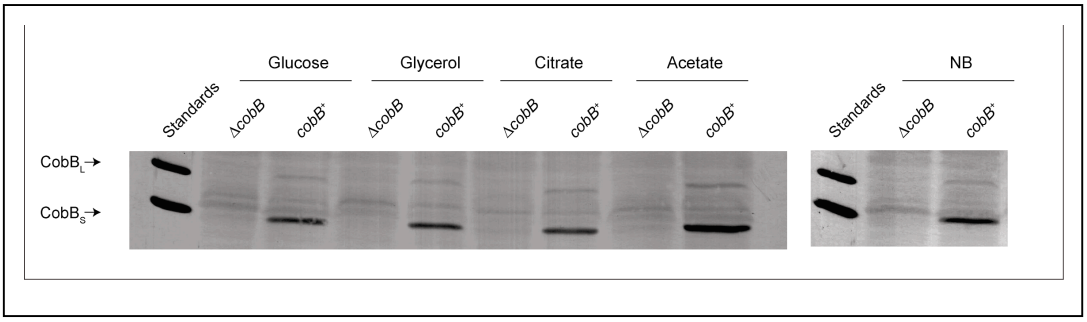

Figure S2. *Se*CobB$_L$ and *Se*CobB$_S$ are synthesized from the pCobB$_L$ and pCobB$_S$ plasmids when cells are grown on glycerol + dicyanocobinamide + DMB. Western blot analysis of *S. enterica cobB* strains overproducing CobB$_L$, CobB$_S$, or CobB$_{L/S}$ during growth on glycerol (22 mM), dicyanocobinamide (15 nM), and DMB (125 μM). CobB$_L$ (CobB^{M37A,M38A}, encoded by *cobB1372*); CobB$_S$ (CobB^{M1A}, encoded by *cobB1373*).

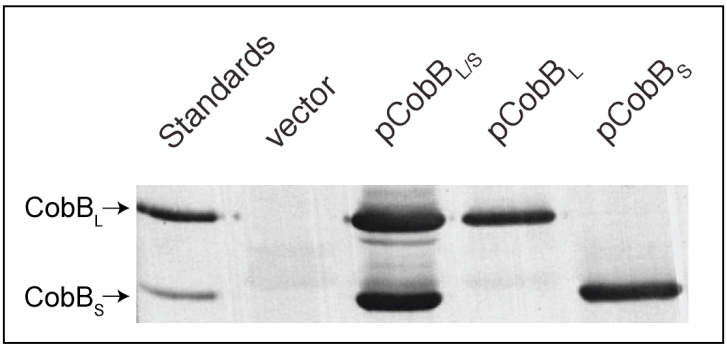

Figure S3. Gel filtration analysis of *Se*CobB$_L$ and *Se*CobB$_S$. Samples were applied to a HiPrep 26/60 Sephacryl S-100 High Resolution gel filtration column using isocratic elution with sodium phosphate (50 mMM, pH 7.4) containing 150 mM NaCl. Calibration was performed with Bio-Rad gel filtration standards supplemented with BSA and DNaseI with linear regression to build the standard curve. Micration of *Se*CobB$_L$ and *Se*CobB$_S$ through the matrix was analyzed and the retention time was consistent with an apparent mass of monomeric enzyme states.

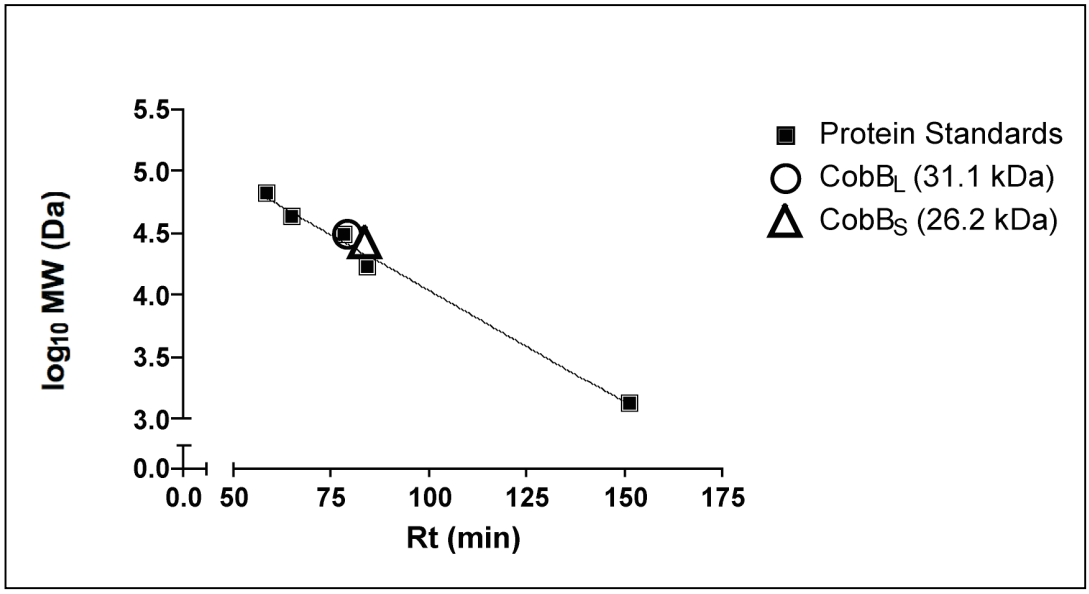

Figure S4. Helical wheel projection of CobB$_L$ N-terminal residues. Residues 6-28 (N-FHRLSRFRKNKRLLRERLRQRIF-C) of the CobB$_L$ N-terminus were subjected to helical wheel analysis using the DNAStar Protean program (Madison, WI).