



Fig. S4. Znu is essential for low zinc adaptation. (A) Cell suspension of $\text{OD}_{600} = 1.0$ was serially diluted and spotted onto plates with the M9 minimal medium with or without $50 \mu\text{M}$ ZnSO_4 , or plates with the YMA medium supplemented with $50 \mu\text{M}$ EDTA, or $50 \mu\text{M}$ EDTA and $50 \mu\text{M}$ ZnSO_4 . Plasmids pB-*znuA*, pB-*zip1* and pB-*c06450* were used in complementation experiments. **(B)** Growth defects of *znu* mutants on M9 plates can be partially restored by adding CoCl_2 . Cell suspension of $\text{OD}_{600} = 1.0$ was serially diluted and spotted onto plates with the M9 medium supplemented with $20 \mu\text{M}$ or $2 \mu\text{M}$ CoCl_2 .