

Fig. S5. LOS-deficient strains produce no LOS. A) Gel electrophoresis and ProQ emerald stain of LOS isolated from 5075 Tn mutants that disrupt the elongasome and LOS-deficient mutants isolated from these strains. *E. coli* W3110 (labeled *E. coli* K12) and *S. enterica* serovar typhimurium LT2 (labeled *S. enterica*) used as controls for LOS and LPS staining respectively. Since *E. coli* K12 strains lack O-antigen, the LPS of these bacteria has similar size to LOS. B) Gel electrophoresis and ProQ emerald stain of LOS isolated from 19606 LOS-deficient strains: 19606 LOS–, the $\Delta m laE \Delta p ldA$ LOS-deficient strain used for building a Tn-mutant library (labeled $\Delta m laE \Delta p ldA$ LOS– for Tn library) and the $\Delta m laE \Delta p ldA \Delta l p x C$ LOS-deficient strain used for experiments (labeled $\Delta m laE \Delta p ldA$ LOS– for experiments). C-D) TLC analysis of lipid A species (C) and glycerophospholipids (D) from 19606 LOS-deficient strains labeled with ³²P_i.