



FIG S2 Expression of MamK^{WT}, MamK^{E143A} and MamK^{D161A} in $\Delta mamK$ cells. (A) Immunoblotting with anti-MamK antibody of cell free extracts (10 μ g protein/lane) from wild-type, $\Delta mamK$, and the MamK-complemented strains. The MamK content of the complemented strain was similar to that of the wild-type strain. (B) Immunoblotting with the anti-MamK antibody of cell free extracts (10 μ g protein/lane) from the MamK-complement strain, and MamK^{E143A} and MamK^{D161A} expressed $\Delta mamK$ cells. (C) Immunofluorescence images of I) wild-type, II) MamK-complement strain, III) MamK^{E143A} and IV) MamK^{D161A} expressed $\Delta mamK$ cells with the anti-MamK antibody. The MamK ATPase mutants, MamK^{E143A} and MamK^{D161A}, showed linear filamentous localizations similarly to MamK^{WT}.