



**Supplementary Fig. S2:** Schematics (a) and fluorescence micrograph of *M. gryphiswaldense*  $\Delta mamM$  mutant cells expressing CheW<sub>1</sub>-EGFP alone (b) or in combination with MamC-2xGBP (c) and wild type cells expressing chromosomal CheW<sub>1</sub>-EGFP and cytoplasmic GBP (d), or CheW<sub>1</sub>-EGFP and MamC-mCherry-GBP (e,f). Scale bar 2  $\mu\text{m}$ .