Supplementary figures



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Figure S1. Toxicity due to *mpr* **overexpression.** (A) Growth curve of MsmWT under *mpr* overexpressed condition is shown; empty vector (pMA-His) is used as a control. (B) FACS analysis of MsmWT under *mpr* overexpressed condition at 3 and 6 h of induction after labelling the cells with sytox green; percent value represents the sytox green positive cells. (C) Expression of GST and Mpr from pMIA system is shown by western blotting. Anti-GST and anti-Mpr antibodies are used to detect the expression of respective proteins. Two molecular weight marker bands are marked (in kDa) for reference.



Figure S2. Colony morphology of mutants. (A) Panel shows different colony morphology of mutants and the wildtype on MB agar plate. Mutant cultures were grown in a liquid medium followed by serial dilution and plating on MB plates. Single colonies are photographed and shown. (B) Graph showing PFU count representing unabsorbed phages in mutant culture; wildtype (WT) cells are used as control.



Figure S3. Weak phage resistance in mutant colonies appeared in knockout culture. (A) Shown is the agar plate image with mutant/resistant colonies appearing in the absence of *mpr*. Panel B shows a continuous fluctuation in OD_{600} in case of mutant colonies rising in the absence of *mpr*. Only one representative graph is shown here.