

S1 Fig: Time course of heterologous expression of catcher and tag proteins in M15 [pREP4] *E.coli* cells. Expression of recombinant proteins was performed at 28°C with 180 rpm shaking for 4h. Once the cells reached an OD600 of approx. 0.5, expression was induced with 1mM IPTG (0.5mM IPTG for  $3kptC^{C}$ ) (final concentration). Recombinant protein expression was monitored by SDS-PAGE and Coomassie Brilliant blue staining of the samples (lane 1: 0h, lane 2: 1h, lane 3: 2h, lane 4: 3h, lane 5: 4h). An arrow indicates the product band. (A) Heterologous expression of  $3phs^{C}$  and  $3phs^{T}$ -MBP, (B) heterologous expression of  $3kptC^{C}$  and  $3kptC^{T}$ -MBP, (C) heterologous expression of  $4oq1^{C}$  and  $4oq1^{T}$ -MBP, (D) heterologous expression of  $3kptN^{C}$  and  $3kptN^{T}$ -MBP. Samples were adjusted to the same  $OD_{600}$  and same volume was loaded on the gel. MW stands for molecular weight (kDa).