



**Figure S1.** Localisation precision histograms corresponding to dSTORM data from Figure 3. **A)** *E. coli* anti-OmpA; **B)** wild type rMOMP; **C)** rMOMP C201A; **D)** rMOMP C203A; **E)** rMOMP C201/203A; **F)** rMOMP C136A; **G)** rMOMP C136/201A; **H)** rMOMP C136/203A; and **I)** rMOMP C226A.

**Table S1.** Primers used for cysteine mutant production. Bold indicates the location of the cysteine mutation and underline indicates a cysteine previously mutated.

<b>Mutation</b>	<b>Forward</b>	<b>Reverse</b>
C136A	GGGATCGCTTTGATGTTTT <b>CGCT</b> ACTTTAGGAGCTTCTAATGG	CCATTAGAAGCTCCTAAAGT <b>AGCG</b> AAAACATCAAAGCGATCCC
C201A	CTCGTGGAGCCTTATGGGAAG <b>CCGG</b> TTGTGCAACTTTG	CAAAGTTGCACAAC <b>CCGG</b> CTTCCCATAAGGCTCCACGAG
C203A	GCCTTATGGGAATGCGGT <b>GCTG</b> CAACTTTGGGAG	CTCCCAAAGTTGC <b>AGC</b> ACCGCATTCCCATAAGGC
C201A/C203A	GCCTTATGGGAAG <b>CCGG</b> T <b>GCTG</b> CAACTTTGGGAG	CTCCCAAAGTTGC <b>AGC</b> ACCGGCTTCCCATAAGGC
C226A	GTTGAAGAACTTAATGTGATC <b>GCTA</b> ACGTATCGCAATTCTCTGTAAAC	GTTTACAGAGAATTGCGATACGTT <b>AGCG</b> GATCACATTAAGTTCTTCAAC

