

**Table S5** The characteristics of polypeptides in molecular dynamics simulations.

Polypeptide	Sequence	Number of Hydrophobic Residues	Number of Charged Residues	Length
OmpC N-terminal Fragment	AEVY <u>N</u> K <u>D</u> G <u>N</u> K <u>L</u> D <u>L</u> Y <u>G</u> K <u>V</u> D <u>G</u> L	8	7	20
OmpA N-terminal Fragment	APK <u>D</u> NTWYTGAK <u>L</u> GF <u>S</u> QY <u>H</u> DT	7	5	21
OmpF N-terminal Fragment	AEIY <u>N</u> K <u>D</u> G <u>N</u> K <u>V</u> D <u>L</u> Y <u>G</u> K <u>A</u> V <u>G</u> L	9	6	20
OmpC C-terminal Fragment	FTR <u>D</u> AGINT <u>D</u> NIVALGLVYQF	11	3	21
OmpC Ala Mutant	Ace-AAVYNAAGNALALYGAVAGL-Nhe	15	0	20
OmpC Asn Mutant	Ace-ANVYNNNGNNLNLYGNVNGL-Nhe	8	0	20
OmpA Ala Mutant	Ace-APAANTWYTGAAALGF <u>S</u> QYAAT-Nhe	12	0	21
OmpA Asn Mutant	Ace-APNNNTWYTGANLG <u>S</u> QYNNT-Nhe	7	0	21