

OmpT 在 Tween-20 胶束中折叠的单分子研究

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Single-Molecule Study on the Folding of OmpT in Tween-20 Micelles

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Table S1 Summary of protein mutants in this study.

Protein	Mutant
OmpT	OmpT-G145C
	OmpT-G145C/N270C
	OmpT-N11C/G145C
	OmpT-N125C/N244C
OmpC	OmpC-G8C/D335C
tOmpA	OmpA-N5C/G160C

Table S2 Primers used in plasmid construction.

Protein	Mutation site	Primer	DNA Sequence (5' -3')	
OmpT	N11C	Forward	CGTTTACTCCTGACTGTATAAATGCGGACATTAG	
		Reverse	ACTAATGTCCGCATTTATACAGTCAGGAGTAAACG	
	N125C	Forward	GAACCCTGTTACCGCTGGGACTC	
		Reverse	AGGCGGTAACAGGGTTCGTTGAGG	
	G145C	Forward	GCTTTACAGCCAGATGTGGTTCCTATATCTAC	
		Reverse	TGTAGATATAGGAACCACATCTGGCTGTAAAG	
	N244C	Forward	GTTATTACGTACACCTTGTGCAAAAAGTTTATGTT	
		Reverse	AACATAAACTTTTGCACAAGGTGTGACGTAATAAC	
	N270C	Forward	ACTTTATGATCACAATTGCAACACTTCAGACTACA	
		Reverse	GCTGTAGTCTGAAGTGTGCAATTGTGATCATA	
	OmpC	G8C	Forward	CAACAAAGACTGCAACAAATTAGATCTGTACGG
			Reverse	CTAATTGTTGCAGTCTTGTGTAAACTTCAGC
D335C		Forward	CGCTGGCATCAACACTTGTAAACATCGTAGCTCTG	
		Reverse	CAGAGCTACGATGTTACAAGTGTGATGCCAGCG	
tOmpA	N5C	Forward	ATGGCTCCGAAAGATTGCACCTGGTACAC	
		Reverse	CCAGTGTACCAGGTGCAATCTTTCGGAGC	
	G160C	Forward	ACTCGTCCGGACAACATGCATGCTG	
		Reverse	AGGCTCAGCATGCAGTTGTCCGG	

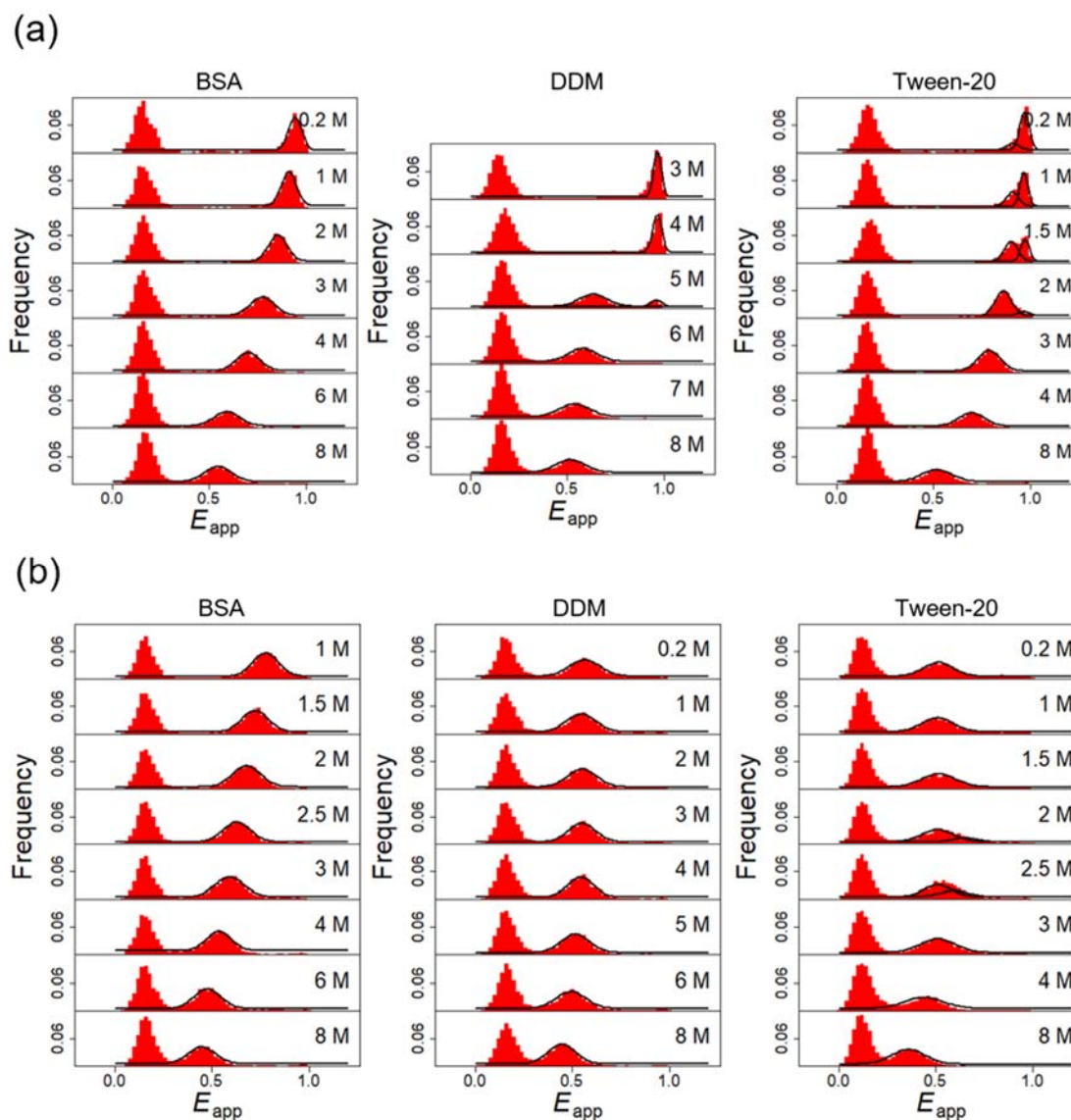


Fig. S1 smFRET efficiency histograms of OmpT N125C/N244C (a) and OmpT N11C/G145C (b) dispersed in BSA (left), DDM (middle) and Tween-20 (right). In the case of OmpT N11C/G145C, guided by the moving trend of the peaks in the control (BSA), the fixed peak at low urea concentrations in both DDM and Tween-20 can be easily assigned to the folded OmpT.

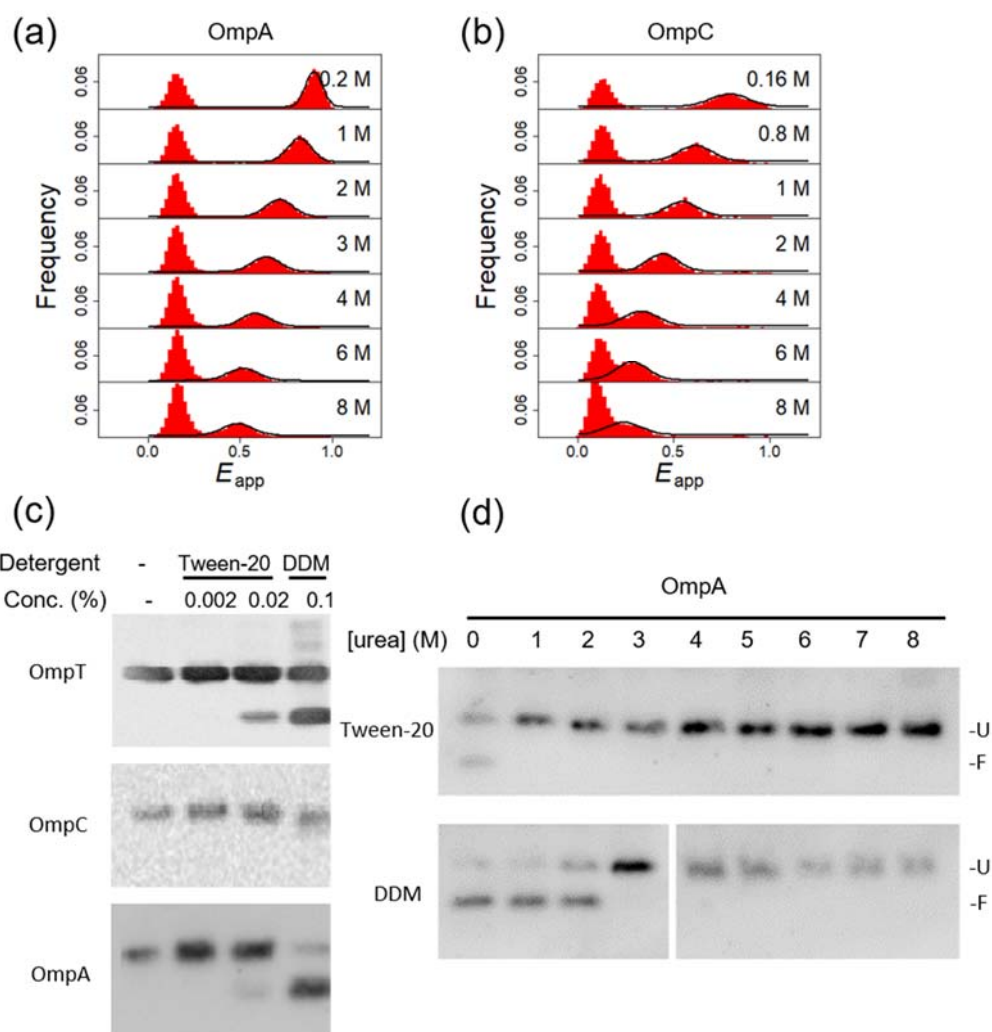


Fig. S2 Folding property of OmpC and tOmpA. smFRET efficiency histograms of tOmpA N5C/G160C (a) and OmpC G8C/D335C (b) dispersed in Tween-20. (c) SDS-PAGE analysis of the refolding OmpT, OmpC and tOmpA in the presence of Tween-20 and DDM (U: unfolded, F: folded). (d) SDS-PAGE analysis of tOmpA refolding in Tween-20 and DDM at various urea concentrations.

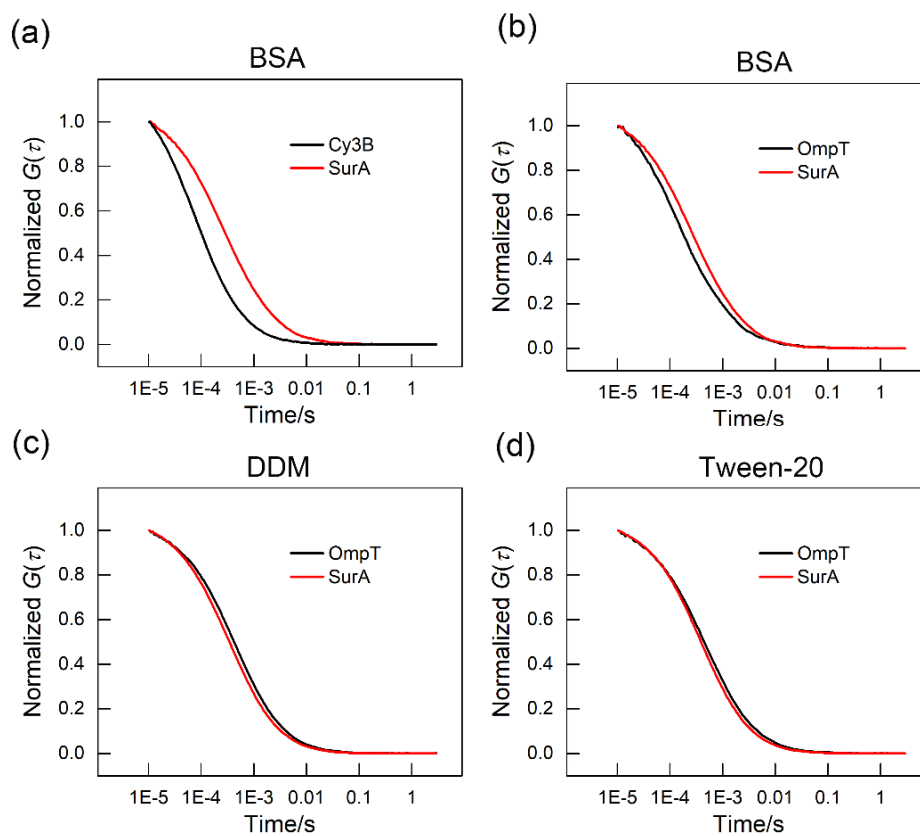


Fig. S3 Normalized FCS curves of Cy3B and SurA in BSA (a), OmpT and SurA in BSA (b), DDM (c) and Tween-20 (d).

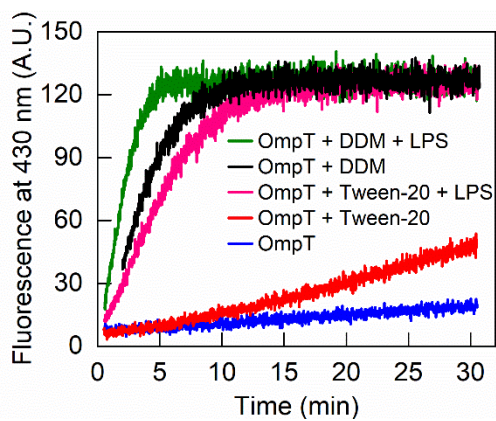


Fig. S4 Enzymatic activity of OmpT with or without LPS.