

## Supplementary Material

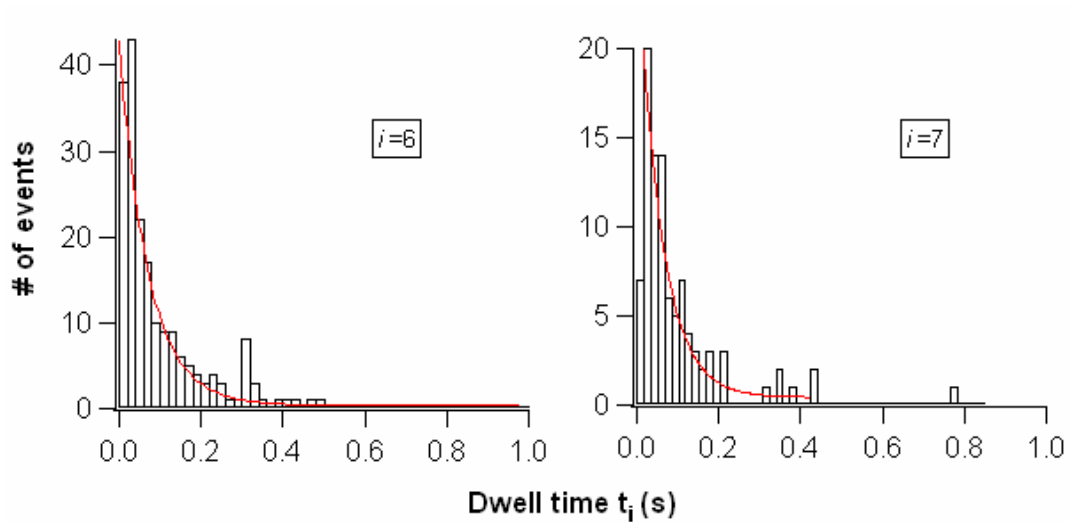


Figure S1. Histograms for dwell time  $t_i$  with  $i$  equals to 6 and 7. Red lines are single exponential fits to the experimental data.

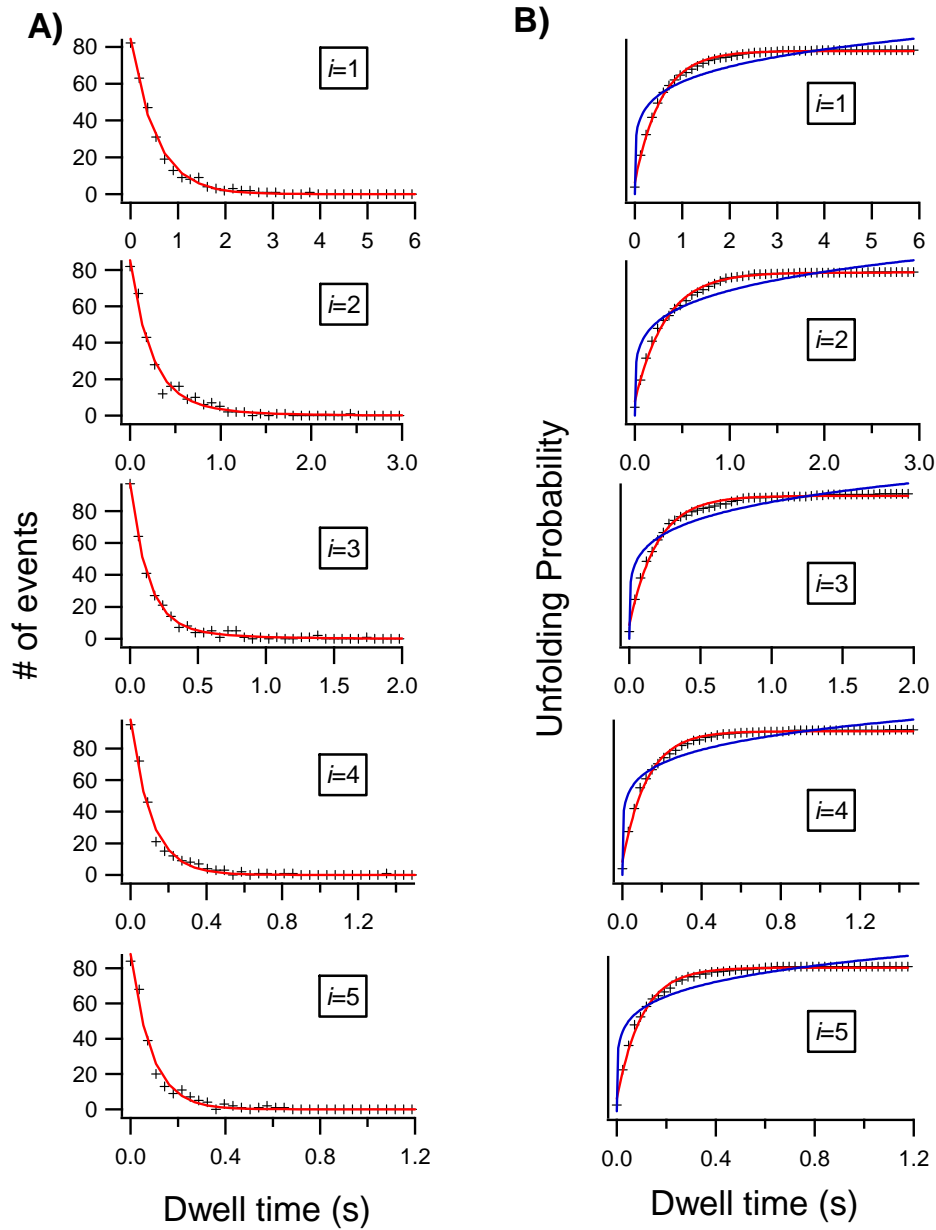


Figure S2. Comparing different fitting models to experimental data. A) Double exponential fits (red lines) to the dwell time distributions (symbols). B) Power law fits (blue lines) to the probability distribution (symbols). The probability distribution (symbols) is calculated from the dwell time distribution (probability density function). For comparison, single exponential fits (red lines) to the probability distributions are also shown. It is evident that the power law (blue line) does not describe the experimentally data.

Table S1. Comparison of different models to fit our experimental data.

i	Single Exponential $y_0+A\exp(-\alpha x)$		Double Exponential $y_0+A_1\exp(-\alpha_1x)+ A_2\exp(-\alpha_2x)$			Power Law $y_0+x^\gamma$	
	Rate constant $\alpha$	$R^2$	Rate constant and amplitude $\alpha_1 (A_1)$	Rate constant and amplitude $\alpha_2 (A_2)$	$R^2$	Power $\gamma$	$R^2$
1	1.86	0.995	1.86 (52.1%)	1.86 (47.9%)	0.995	0.183	0.88
2	3.69	0.982	1.41 (14.7%)	4.50 (85.3%)	0.983	0.201	0.89
3	6.68	0.995	1.81 (8.4%)	7.74 (91.6%)	0.997	0.190	0.90
4	9.13	0.989	9.24 (52.7%)	9.24 (47.3%)	0.989	0.167	0.88
5	11.35	0.984	11.45 (52.3%)	11.45 (47.7%)	0.98	0.170	0.88
6	14.30	0.937	3.90 (e7.3%)	16.11 (92.7%)	0.938	0.185	0.90
7	16.56	0.950	4.06 (4.3%)	17.73 (95.7%)	0.951	0.179	0.88