

**S1 Table. Simulation parameters for synthetic particle trajectories.** Diffusivities, static localization noises, and population fractions used to generate synthetic protein trajectories are presented for case 1, case 2, and case 3. The columns represent the set of parameter values for each diffusive state.

		1	2	3	4	5	6	7
1	$D_k^{sim}(\mu\text{m}^2\text{s}^{-1})$	0.01	0.3	1.2	2.8			
	$\pi_k^{sim}$	0.20	0.30	0.40	0.10			
	$\sigma_k^{sim}(\mu\text{m})$	0.035	0.05	0.035	0.05			
2	$D_k^{sim}(\mu\text{m}^2\text{s}^{-1})$	0.03	0.1	0.25	0.45			
	$\pi_k^{sim}$	0.20	0.10	0.40	0.30			
	$\sigma_k^{sim}(\mu\text{m})$	0.035	0.05	0.035	0.05			
3	$D_k^{sim}(\mu\text{m}^2\text{s}^{-1})$	$10^{-8}$	0.01	0.06	0.16	0.34	0.55	0.94
	$\pi_k^{sim}$	0.20	0.02	0.05	0.10	0.28	0.30	0.05
	$\sigma_k^{sim}(\mu\text{m})$	0.03	0.035	0.04	0.05	0.04	0.05	0.06