

Fitted Bell-Evans distributions shown in Fig 6

First ddFLN4 unfolding peak					
v [nm/s]	200	800	2,000	5,000	10,000
\dot{F} [pN/s]	768	3,519	10,080	29,010	66,710
F [pN]	66	75	83	89	90
Δx_0 [nm]	0.56	0.47	0.37	0.42	0.42
$k_{off,0}$ [s ⁻¹]	7×10^{-3}	7×10^{-2}	6×10^{-1}	4×10^{-1}	7×10^{-1}
Second ddFLN4 unfolding peak					
v [nm/s]	200	800	2,000	5,000	10,000
\dot{F} [pN/s]	701	3,609	9,841	29,820	76,030
F [pN]	59	70	78	87	94
Δx_0 [nm]	0.47	0.50	0.41	0.42	0.34
$k_{off,0}$ [s ⁻¹]	1×10^{-1}	9×10^{-2}	4×10^{-1}	5×10^{-1}	2
Biotin:mSA unbinding peak					
v [nm/s]	200	800	2,000	5,000	10,000
\dot{F} [pN/s]	1,736	7,469	20,680	52,390	111,900
F [pN]	201	212	217	222	230
Δx_0 [nm]	0.33	0.35	0.37	0.28	0.22
$k_{off,0}$ [s ⁻¹]	2×10^{-5}	9×10^{-6}	8×10^{-6}	1×10^{-3}	2×10^{-1}

Table A. Fitted Bell-Evans distributions shown in Fig 6. To the histograms shown in Fig 6, Bell-Evans distributions were fitted. Mean loading rate used for the fit, most probable rupture force determined from the fit, and fitting parameters (distance to transition state and zero-force off-rate) are listed for the five retraction velocities and the different force peaks.