

Supplementary Information for Estimation of anisotropic bending rigidity and spontaneous curvature of crescent curvature-inducing proteins from tethered-vesicle experimental data

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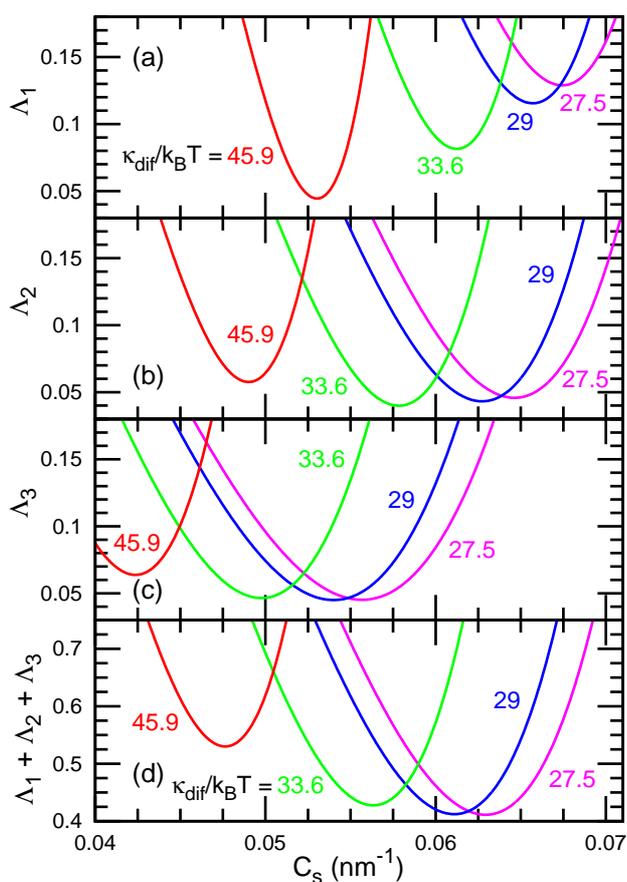


Fig. S 1. Fit deviation as a function of the sensing curvature C_s for I-BAR-domain binding based on the isotropic protein model. From left to right, $\kappa_{\text{dif}}/k_B T = 45.9, 33.6, 29,$ and 27.5 . (a) Fit deviation Λ_1 for $\phi_v = 0.01$. The minimum $\Lambda_1^{\text{min}} = 0.0444$ is obtained at $\kappa_{\text{dif}}/k_B T = 45.9$ and $C_s = 0.0530 \text{ nm}^{-1}$ (corresponding to Fig. 2(a)). (b) Fit deviation Λ_2 for $\phi_v = 0.02$. The minimum $\Lambda_2^{\text{min}} = 0.0399$ is obtained at $\kappa_{\text{dif}}/k_B T = 33.6$ and $C_s = 0.0578 \text{ nm}^{-1}$ (corresponding to Fig. 2(b)). (c) Fit deviation Λ_3 for $\phi_v = 0.05$. The minimum $\Lambda_3^{\text{min}} = 0.0450$ is obtained at $\kappa_{\text{dif}}/k_B T = 29.0$ and $C_s = 0.0540 \text{ nm}^{-1}$ (corresponding to Fig. 2(c)). (d) Sum of fit deviations $\Lambda_1 + \Lambda_2 + \Lambda_3$. The minimum $(\Lambda_1 + \Lambda_2 + \Lambda_3)^{\text{min}} = 0.411$ is obtained at $\kappa_{\text{dif}}/k_B T = 27.5$ and $C_s = 0.0629 \text{ nm}^{-1}$ (corresponding to Fig. 2(d)).

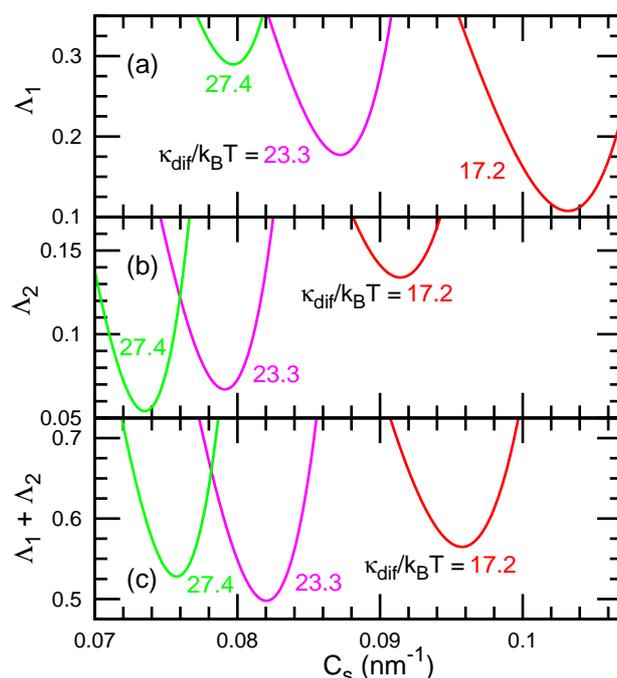


Fig. S 2. Fit deviation as a function of the sensing curvature C_s for N-BAR-domain binding based on the isotropic protein model. From left to right, $\kappa_{\text{dif}}/k_B T = 27.4, 23.3,$ and 17.2 . (a) Fit deviation Λ_1 for $\phi_v = 0.0013$. The minimum $\Lambda_1^{\text{min}} = 0.1075$ is obtained at $\kappa_{\text{dif}}/k_B T = 17.2$ and $C_s = 0.1032 \text{ nm}^{-1}$ (corresponding to Fig. 9(a)). (b) Fit deviation Λ_2 for $\phi_v = 0.0043$. The minimum $\Lambda_2^{\text{min}} = 0.0541$ is obtained at $\kappa_{\text{dif}}/k_B T = 27.4$ and $C_s = 0.0735 \text{ nm}^{-1}$ (corresponding to Fig. 9(b)). (c) Sum of fit deviations $\Lambda_1 + \Lambda_2$. The minimum $(\Lambda_1 + \Lambda_2)^{\text{min}} = 0.498$ is obtained at $\kappa_{\text{dif}}/k_B T = 23.3$ and $C_s = 0.0820 \text{ nm}^{-1}$ (corresponding to Fig. 9(c)).