

Abstract Submitted
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Experimental measurements of the rate of capture of synthetic and natural polyelectrolytes by alpha-hemolysin under salt concentration gradients¹ BYOUNG-JIN JEON, MURUGAPPAN MUTHUKUMAR, University of Massachusetts — We report experimental data on the effect of gradients in salt concentration on the capture rate of synthetic and natural polyelectrolytes by the alpha-hemolysin pore under an electric field. We find that the capture rate is non-monotonic with the ratio of salt concentration in the trans to that in the cis. We have also determined the extent of the nonmonotonicity at different pH conditions. Our results present challenges for an understanding of the phenomenon.

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