Supporting Information

Analysis for Effect of Cations on Protein Conformational Stability Using Solid-State Nanopores

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S1

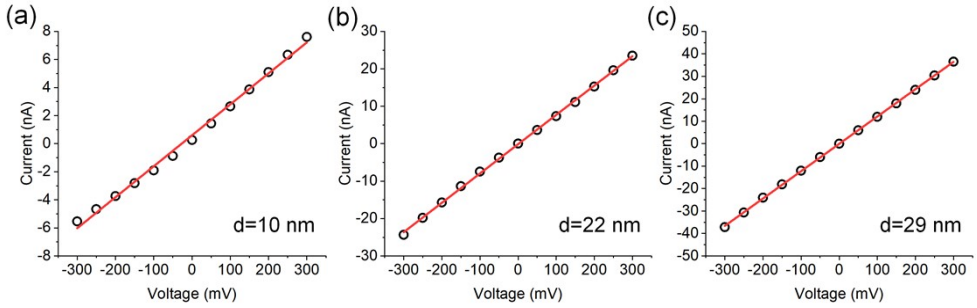

Fig. S1 *I-V* curves for different diameter nanopores in 1 M NaCl.

S2

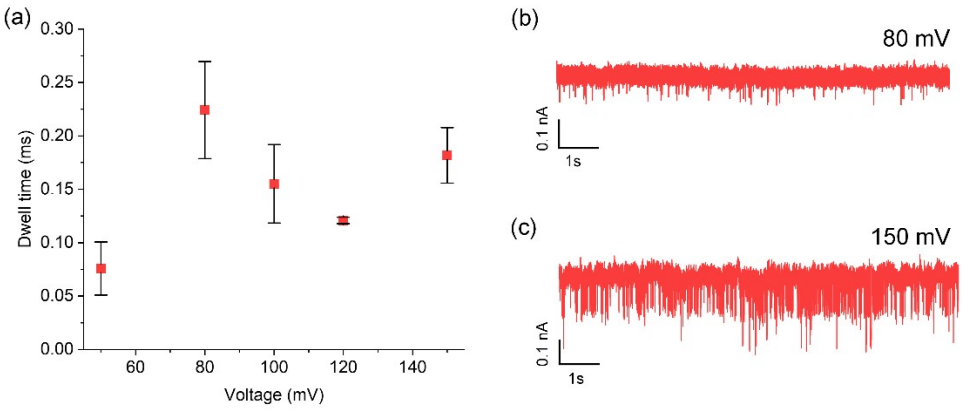

Fig. S2 (a) Dependence of dwell time versus applied voltage for BSA translocating through a ~10 nm diameter nanopore in 1 M NaCl. Continuous current traces of BSA translocating through a ~10 nm diameter nanopore at 80 mV (b) and 150 mV (c).

S3

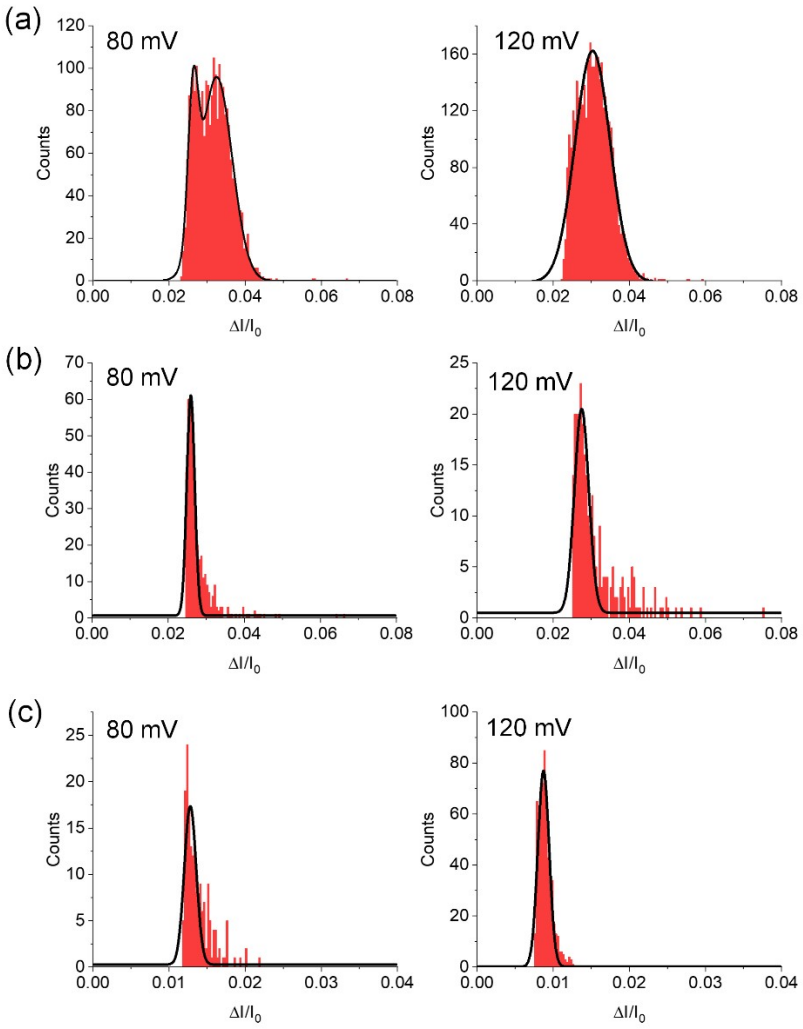

Fig. S3 Histograms of fractional current blockade ($\Delta I/I_0$) for BSA translocation events through a ~10 nm (a), ~22 nm (b) and (c) ~29 nm nanopore at 80 mV and 120 mV.

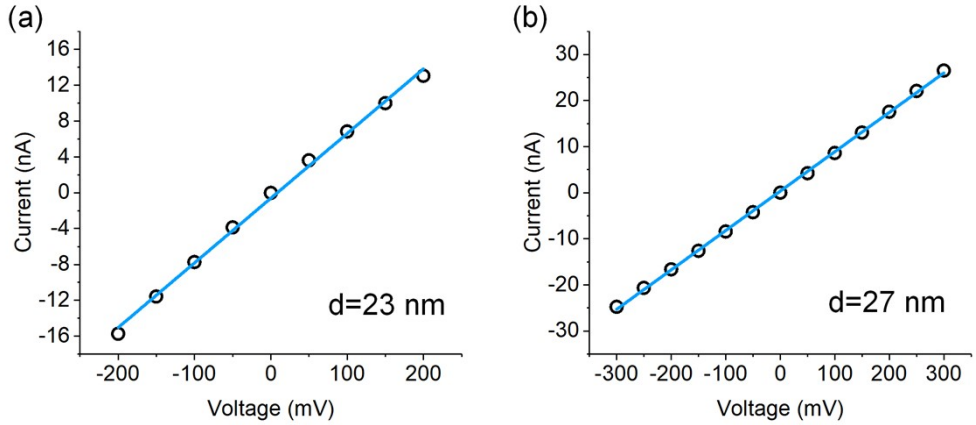

Fig. S4 *I-V* curves for different diameter nanopores in 1 M LiCl.

S5

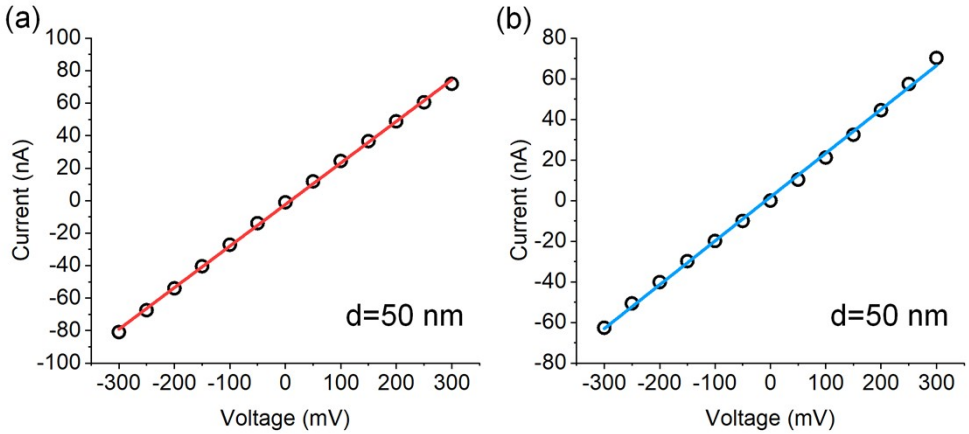

Fig. S5 (a) *I-V* curve of a 50 nm diameter nanopore in 1 M NaCl. (b) *I-V* curve of a 50 nm diameter nanopore in 1 M LiCl.

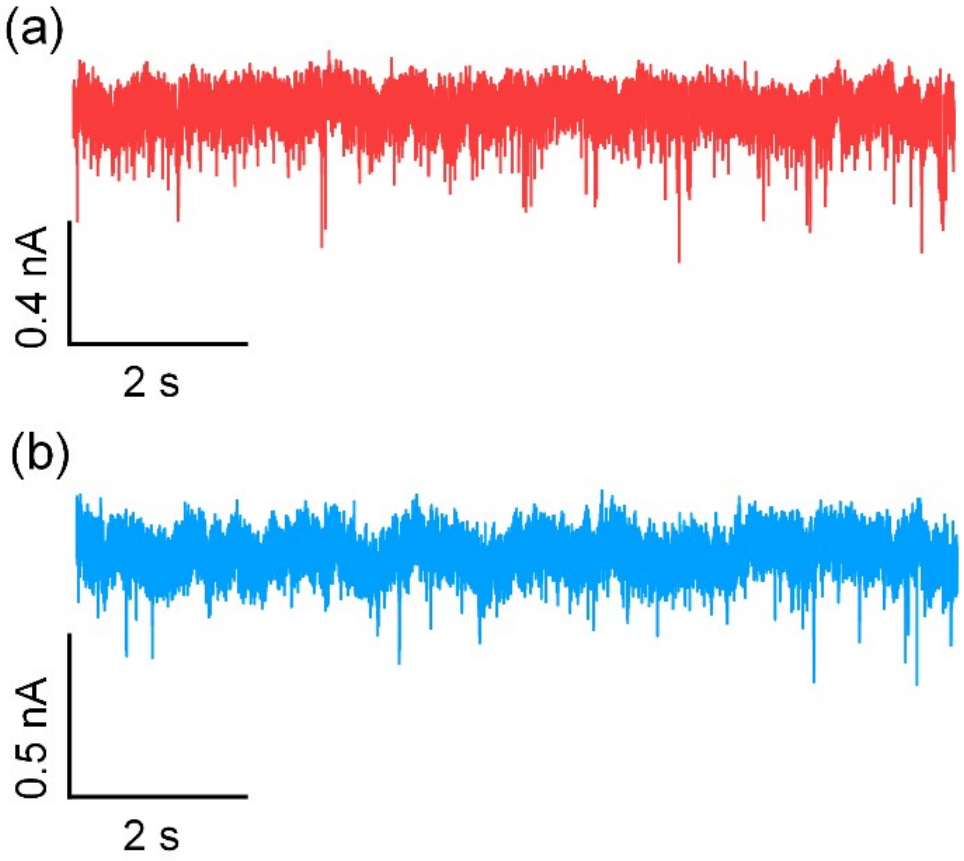

Fig. S6 Continuous current traces of BSA translocating through a ~50 nm diameter nanopore at 120 mV in 1 M NaCl (a) and 1 M LiCl (b).

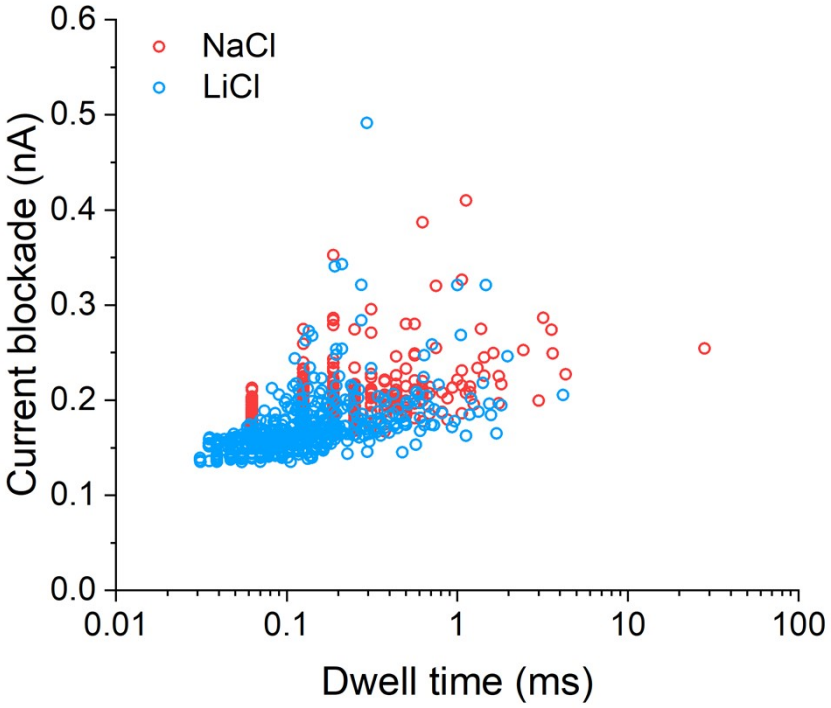

Fig. S7 Current blockade (ΔI) vs dwell time scatter plots for BSA translocation events through a ~50 nm diameter nanopore in different electrolytes.