

Formation of an Unfolding Intermediate State of Soluble Chloride Intracellular Channel Protein CLIC1 at Acidic pH

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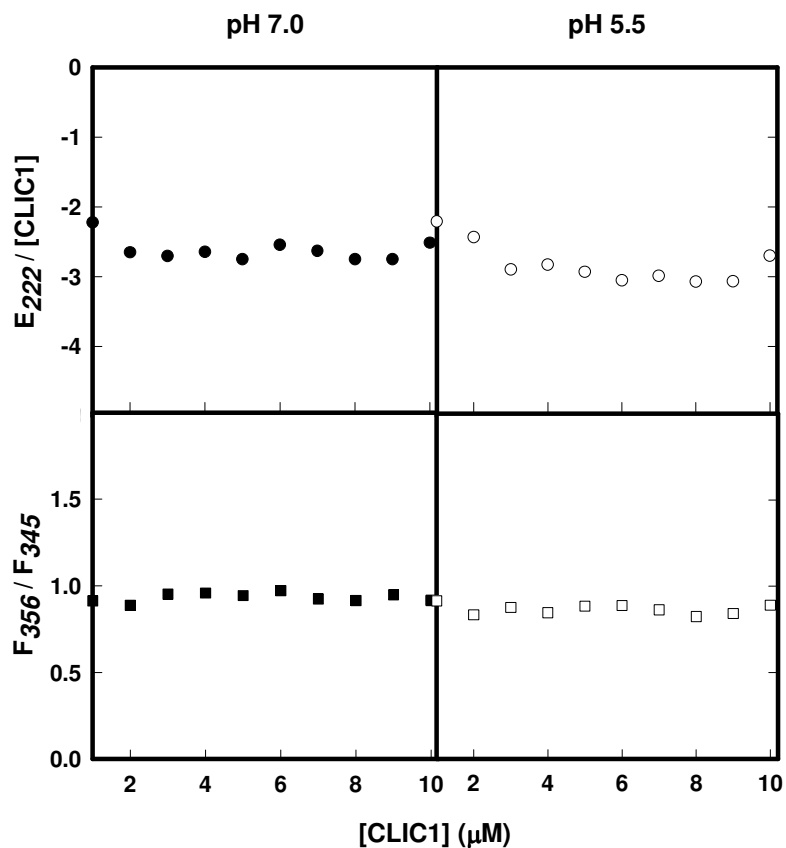


Figure S1. Protein concentration dependence study

The CLIC1 concentration dependence of the midpoint of the equilibrium unfolding transition at both pH 7.0 (closed) and pH 5.5 (open). The study was conducted at 20°C using both E_{222} (●) and the ratio of fluorescence F_{356} / F_{345} (■) as probes. The concentration of CLIC1 ranged from 1 μM to 10 μM . The buffer used was a 50 mM Na_2HPO_4 containing 0.02% NaN_3 ; 1 mM DTT and 4.8 M urea at pH 7.0 or 3.5 M urea at pH 5.5.

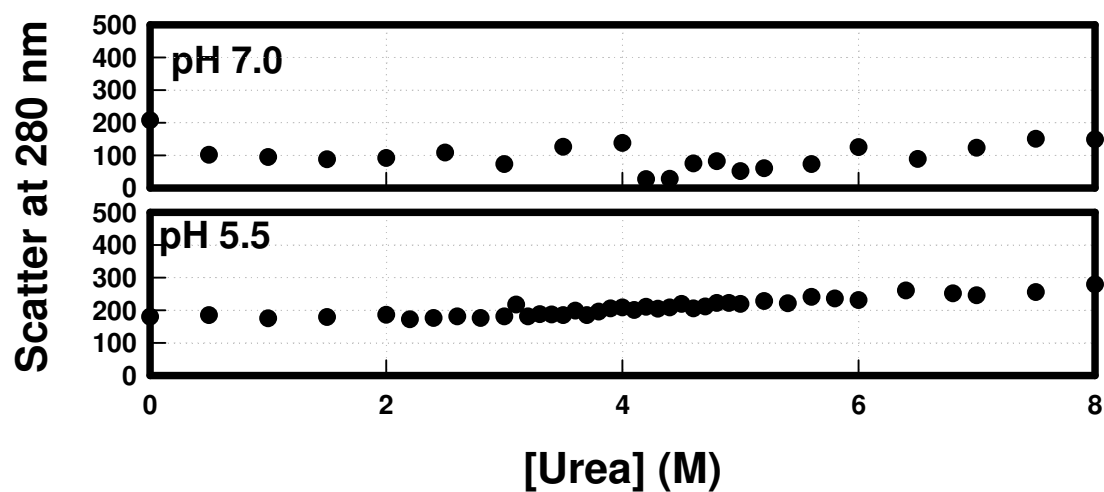


Figure S2. Raleigh scatter to detect aggregation

The plots show the scatter produced by 2 μ M CLIC1 at 280 nm when excited at 280 nm at pH 7 and pH 5.5 in the presence of increasing concentrations of urea. The plots do not show a significant increase in scatter at any point along the unfolding transition which implies the absence of aggregation.

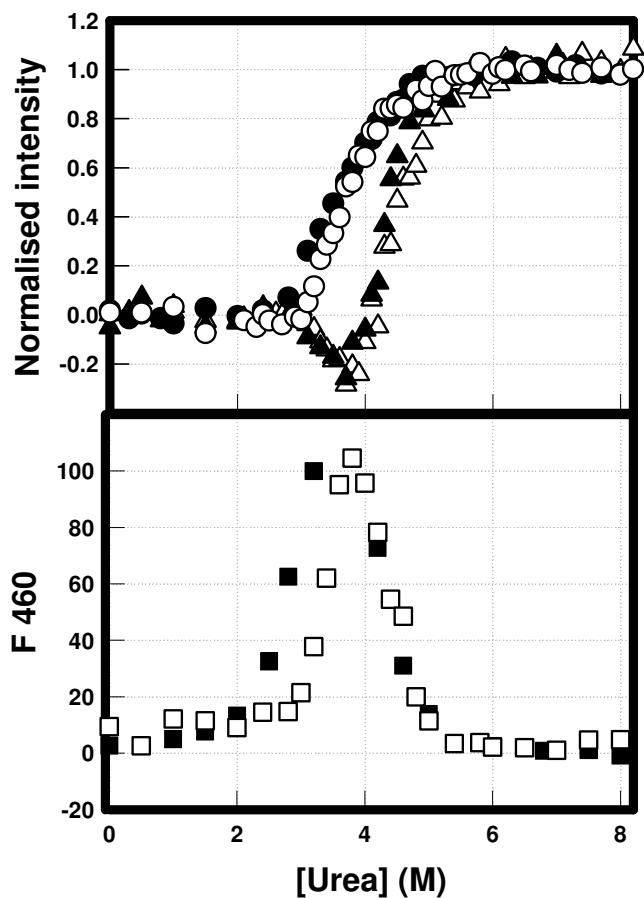


Figure S3. Comparison of unfolding at pH 7, 37°C and pH 5.5, 20°C

Comparison of the urea-induced equilibrium unfolding of 2 μ M CLIC1 at pH 7.0, 37°C (closed) and pH 5.5, 20°C (open). The unfolding was monitored using E_{222} (●/○), λ_{max} (▲/△) and ANS binding (■/□) as probes.