Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary information

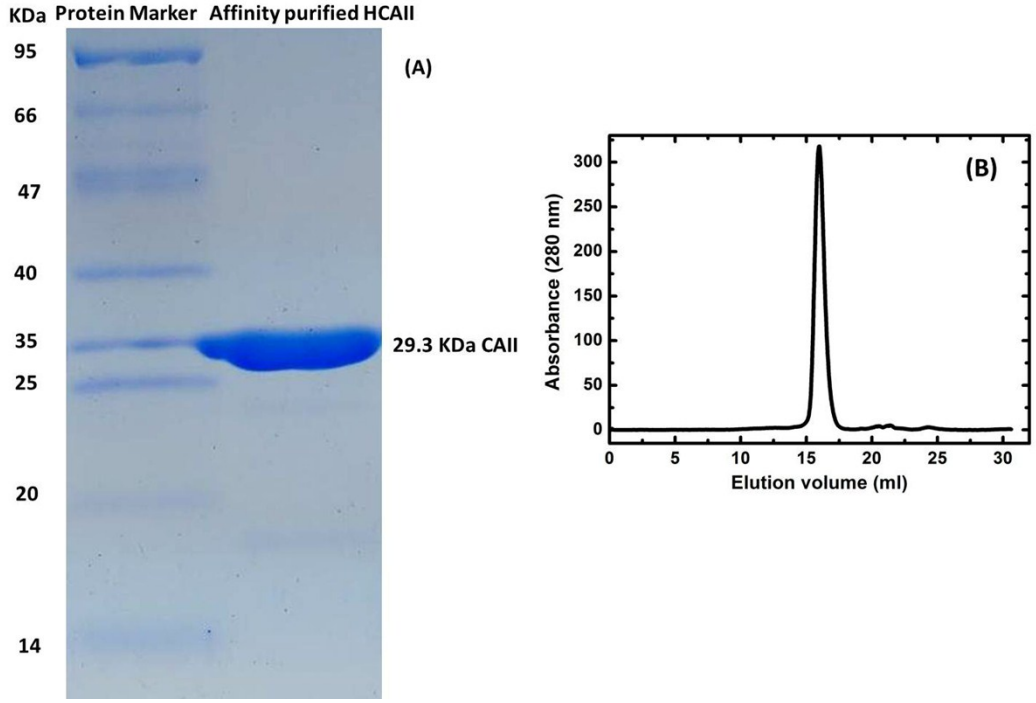

Fig. S1 1D SDS-PAGE gel (A) and Size exclusion chromatography profile (B) of purified protein. Purity of protein is verified by a single band and single peak in SDS-PAGE gel and SEC profile, respectively.

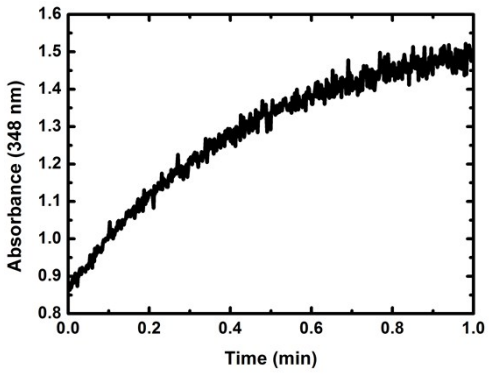

Fig. S2 Enzymatic activity assay of carbonic anhydrase. Kinetics of p-nitrophenol production (absorb at 348 nm) from p-nitrophenol acetate (substrate) by HCAII at 25 °C and pH 7.5.

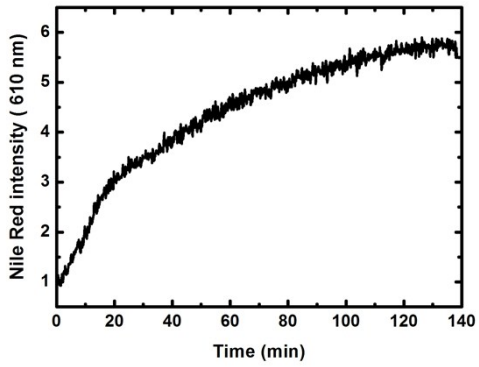

Fig. S3 Aggregation kinetics of HCAII as probed by Nile red in the presence of 100 mM NaCl at 328 K.

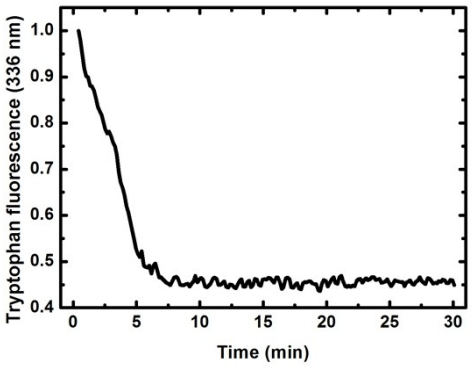

Fig. S4 Aggregation kinetics of HCAII as probed by intrinsic tryptophan fluorescence in the presence of 100Mm NaCl at 328 K.

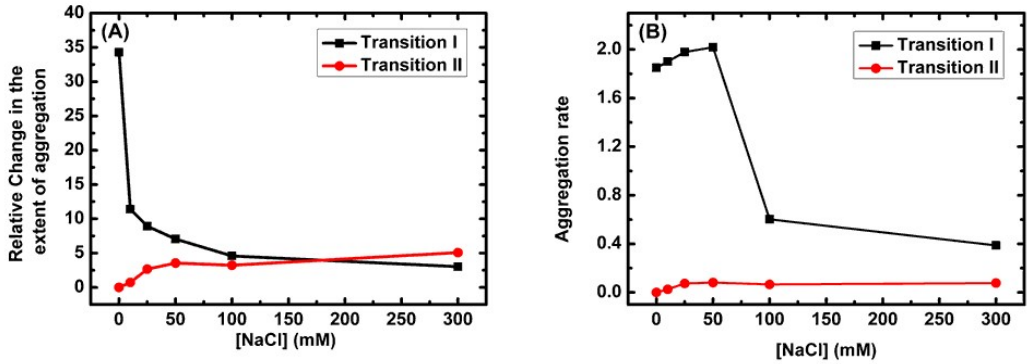

Fig. S5 Dependence of the extent (A) and rate (B) of aggregation of HCAII on NaCl concentration for two transitions.

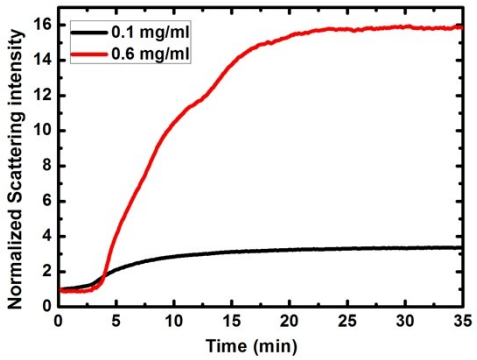

Fig. S6 Aggregation kinetics of HCAII (0.1 and 0.6 mg/mL) in the presence of 100mM at 328 K.

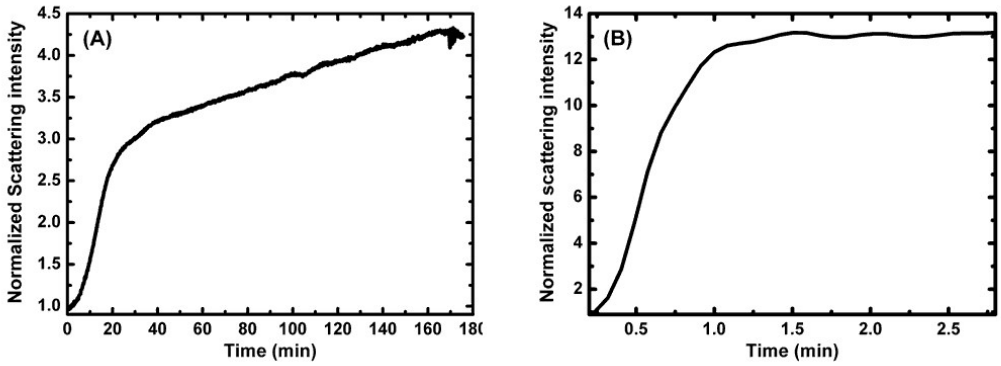

Fig. S7 Aggregation kinetics of HCAII (0.3 mg/mL) in the presence of 100 mM NaCl at (A) 323 K (B) 343K.

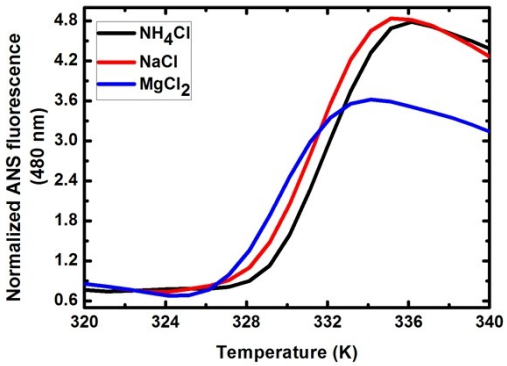

Fig. S8 Thermal denaturation profiles of HCAII in the presence NH_4Cl, NaCl and $MgCl_2$ (100mM each) at pH 7.5.

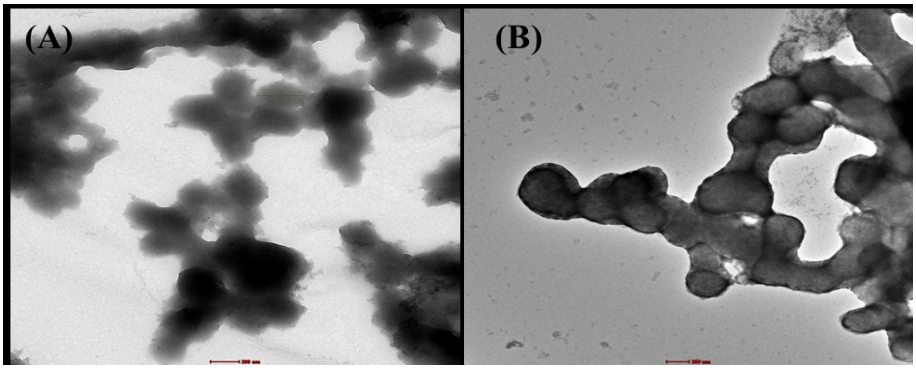

Fig. S9 Transmission electron micrographs of HCAII aggregates collected at time points 3 (A) and 5 (B). Magnification,× 20,000.