

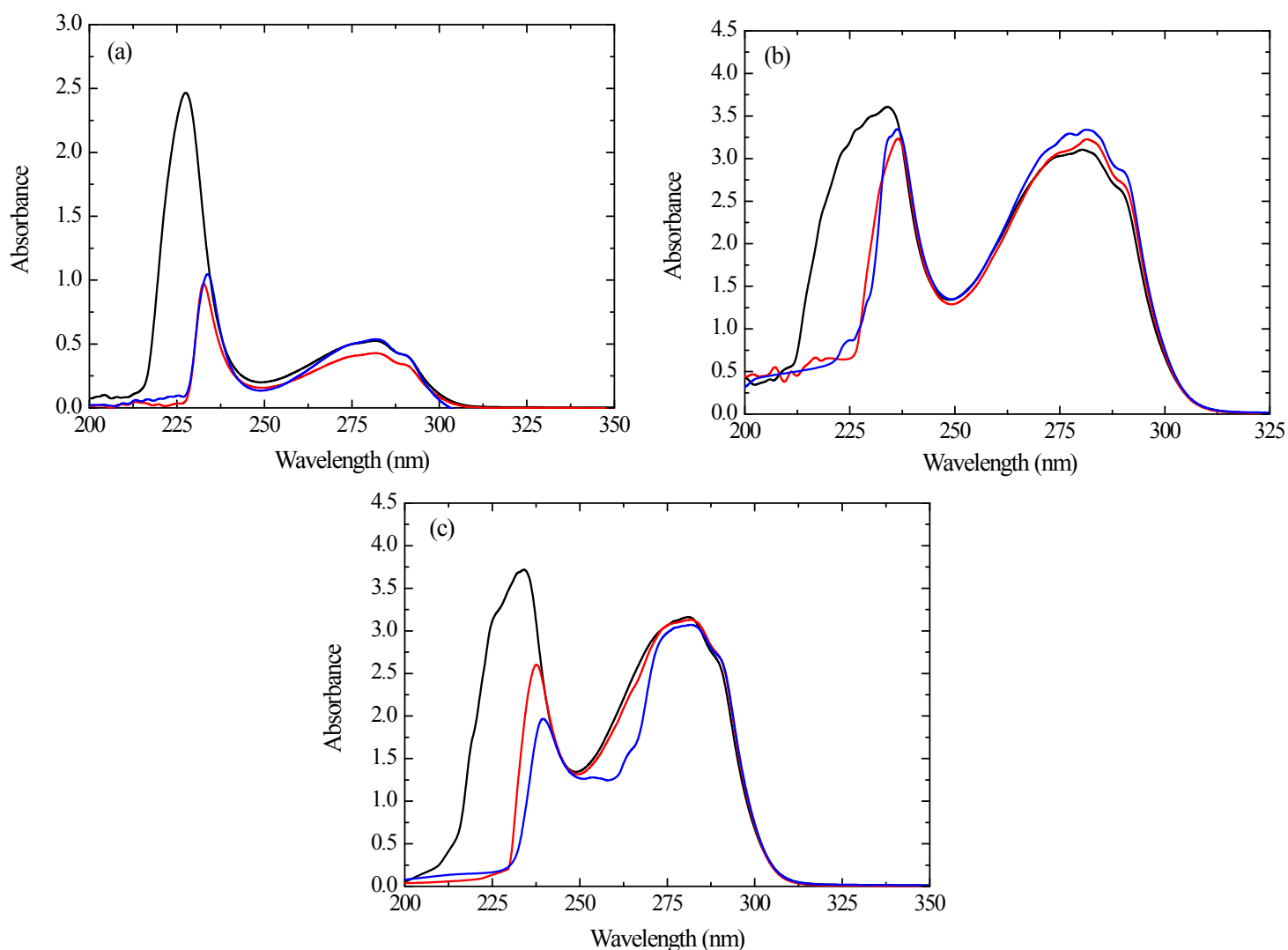
# Superactivity of $\alpha$ -Chymotrypsin with Biological Buffers, TRIS, TES, TAPS, and TAPSO in Aqueous Solutions

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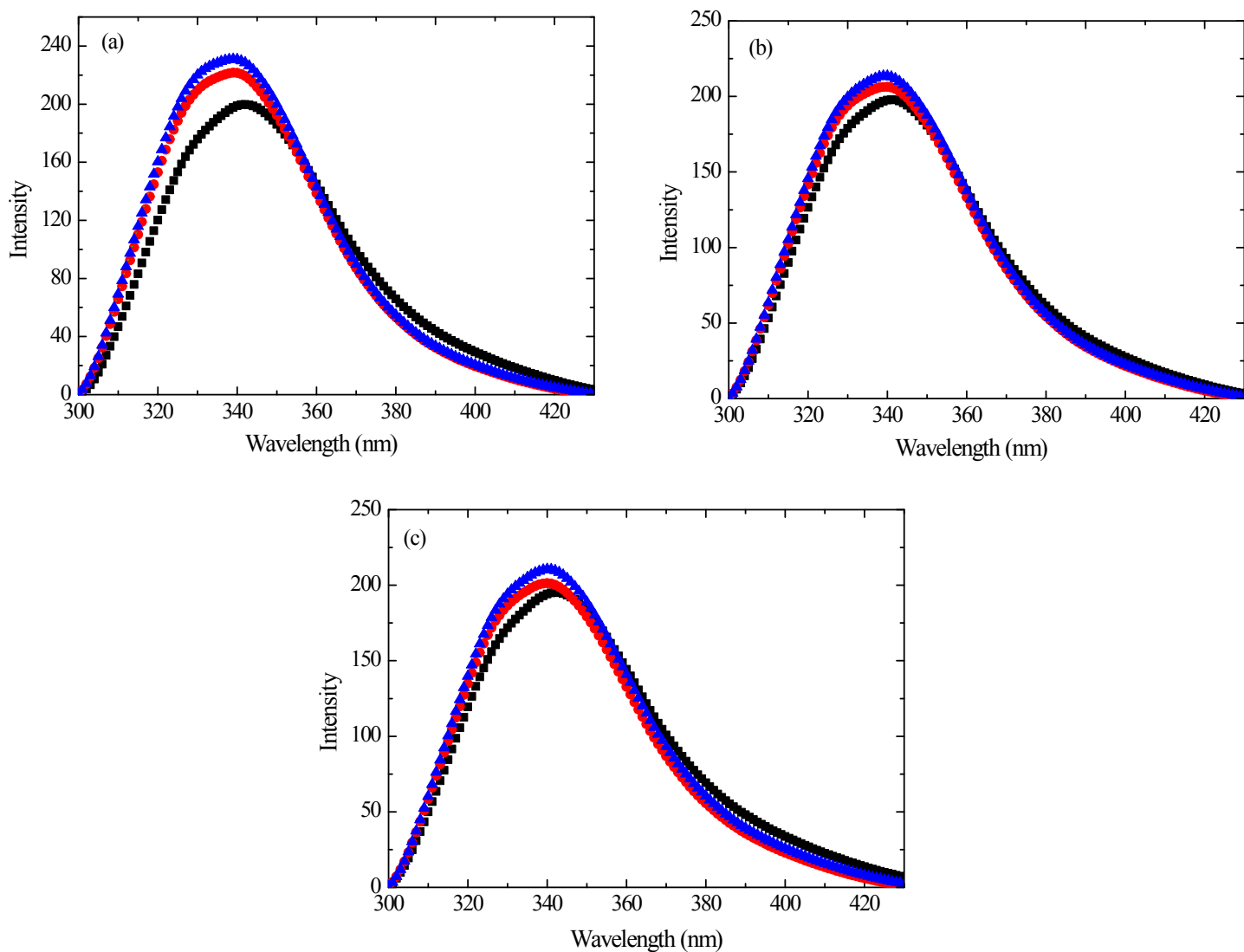
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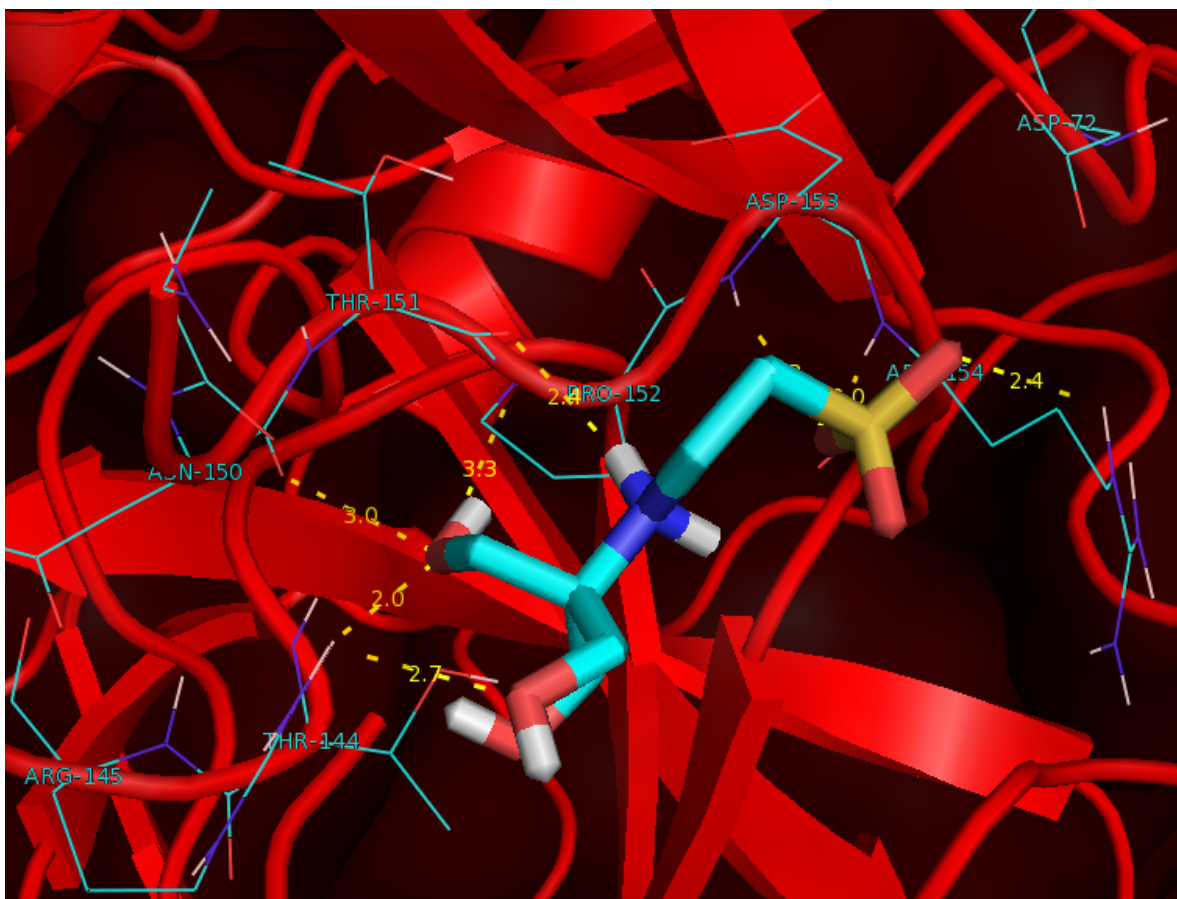
## Supporting Information



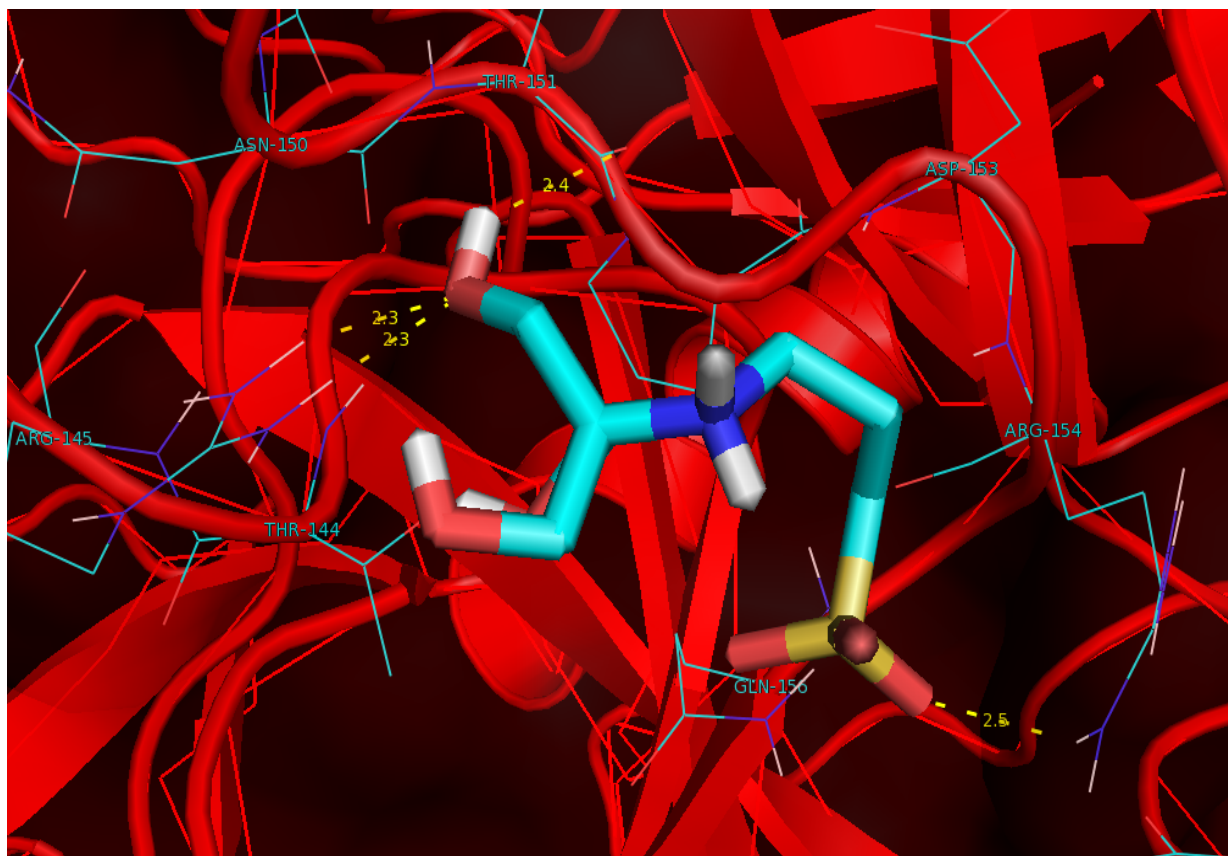
**Fig. 1S (a-c).** The UV-Visible measurements for  $\alpha$ -CT in 0.05 M, 0.5 M, and 0.7 M or 1.0 M TES (a), TAPS (b), and TAPSO (c) at 25 °C and pH = 8.0. Solid black line 0.05 M, solid red line 0.5 M, and solid blue line 1.0 M.



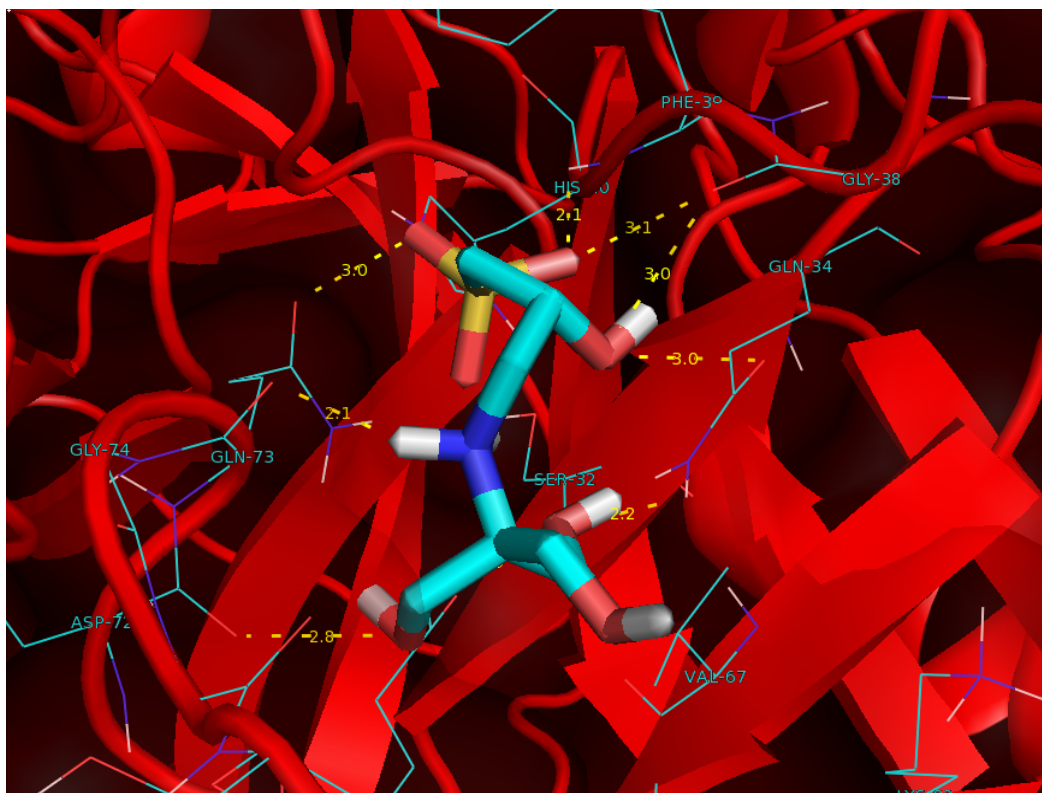
**Fig. 2S (a-c).** The emission fluorescence spectra for  $\alpha$ -CT in 0.05 M, 0.5 M, and 0.7 M or 1.0 M TES (a), TAPS (b), and TAPSO (c) at excited wavelength of 280 nm, 25 °C temperature and pH = 8.0: (■), 0.05M; (●), 0.5 M; (▲), 0.7 or 1.0 M



**Fig. 3S (a).** The hydrogen bond interactions of TES with  $\alpha$ -CT



**Fig. 3S (b).** The hydrogen bond interactions of TAPS with  $\alpha$ -CT



**Fig. 3S (c).** The hydrogen bond interactions of TAPSO with  $\alpha$ -CT