

Electronic Supplementary Information for

**Bioluminescent and spectroscopic properties of His–Trp–Tyr triad mutants of obelin and aequorin**

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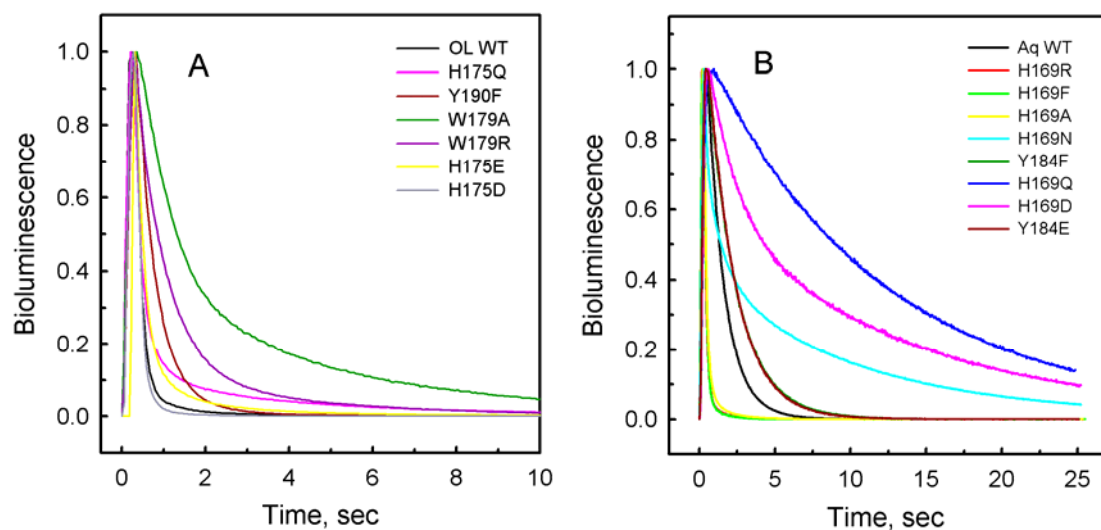
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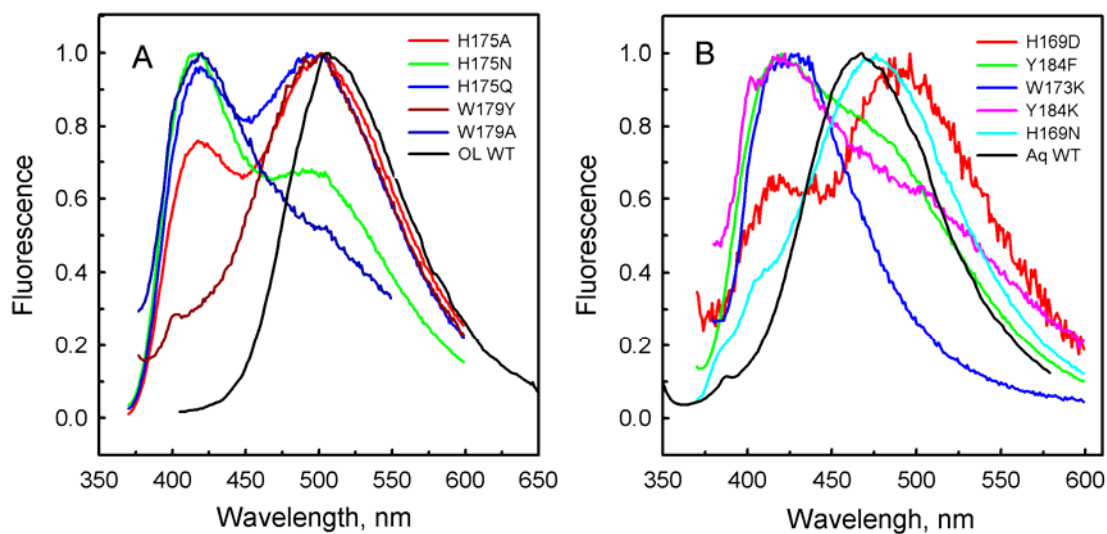
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**Figure S1.** Normalized kinetics of bioluminescence reaction of obelin (A), aequorin (B), and some of their mutants. Bioluminescence decay rate constants shown in Table 2 were calculated by one- ( $y = y_0 + ae^{-k_1x}$ ) or two-exponential ( $y = y_0 + ae^{-k_1x} + be^{-k_2x}$ ) fitting using averaging of 3 decay curves.



**Figure S2.** Normalized fluorescence spectra of obelin (A), aequorin (B) and their mutants at pH 7.0.