Electronic Supplementary Information for

Semisynthetic photoprotein reporters for tracking fast fast Ca²⁺ transients

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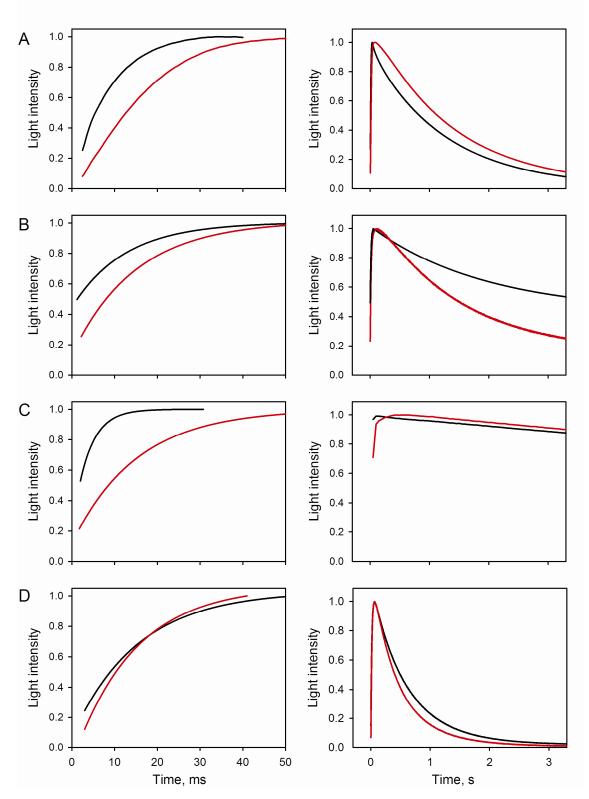


Figure S1. Stopped-flow records of the rising phase (left panel) and full-time course (right panel) of luminescence signal for aequorin reconstituted with native CTZ (A), CTZ-*f* (B), CTZ-*i* (C), and CTZ-*hcp* (D) without Mg^{2+} (black) and with 1 mM Mg^{2+} (red).

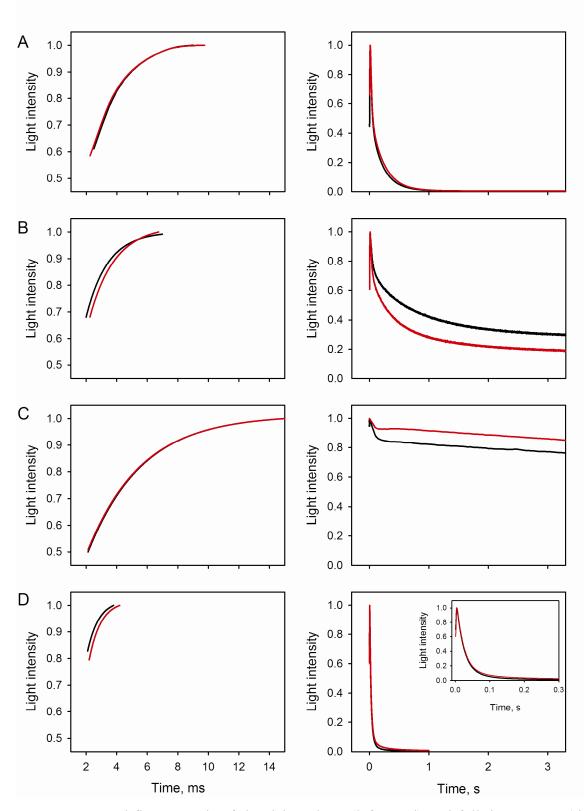


Figure S2. Stopped-flow records of the rising phase (left panel) and full-time course (right panel) of luminescence signal for obelin reconstituted with native CTZ (A), CTZ-*f* (B), CTZ-*i* (C), and CTZ-*hcp* (D) without Mg^{2+} (black) and with 1 mM Mg^{2+} (red). Inset: Stopped-flow records of the full-time course of luminescence signal for obelin-*hcp* without Mg^{2+} (black) and with 1 mM Mg^{2+} (red).

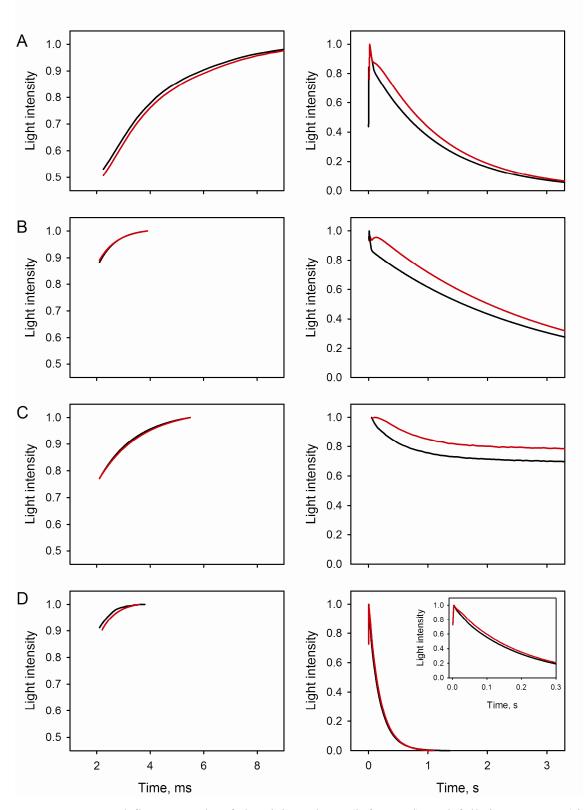


Figure S3. Stopped-flow records of the rising phase (left panel) and full-time course (right panel) of luminescence signal for clytin reconstituted with native CTZ (A), CTZ-*f* (B), CTZ-*i* (C), and CTZ-*hcp* (D) without Mg^{2+} (black) and with 1 mM Mg^{2+} (red). Inset: Stopped-flow records of the full-time course of luminescence signal for clytin-*hcp* without Mg^{2+} (black) and with 1 mM Mg^{2+} (red).