

Supplement: Clinically Divergent Mutation Effects on the Structure and Function of the Human Cardiac Tropomyosin Overlap

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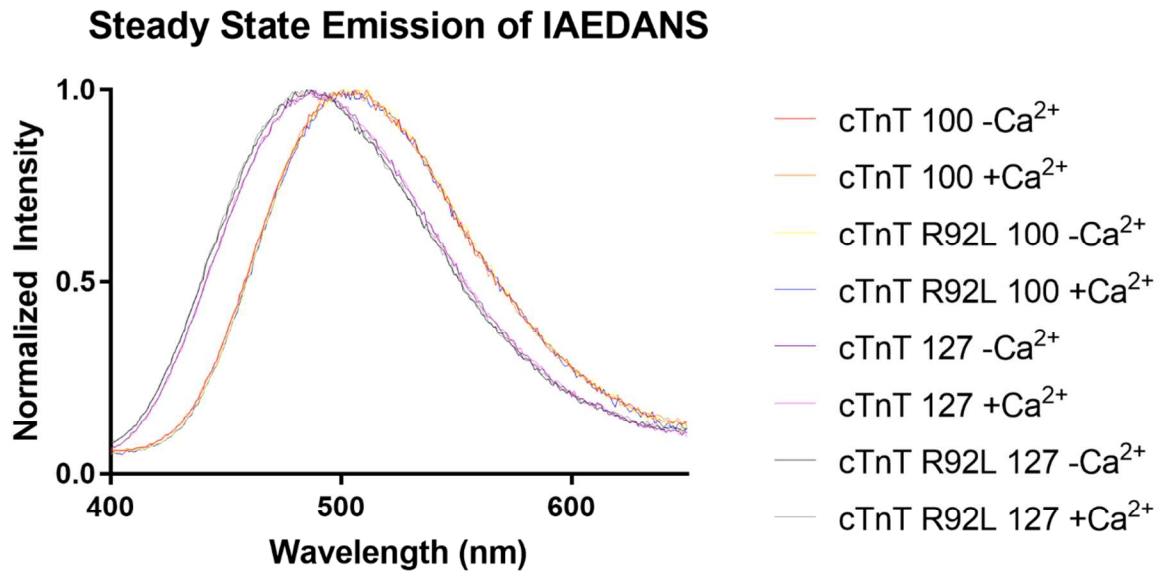


Figure S1. Steady state emission spectrum of all the labeled cTnT used in the experiment, as collected in fully reconstituted thin filaments. The spectra fall into two main groups, dependent on the labeled site (cTnT 100 or cTnT 127)

Table S1. Distances and significance via Tukey's multiple comparison test +/- SE between the FRET pairs *without calcium* for WT, Tm D230N and cTnT R92L variants.

	WT	Tm D230N	cTnT R92L
cTnT 100C - Tm 265C	30.95 ± 0.44	30.03 ± 0.32	31.56 ± 0.49
cTnT 100C - Tm 271C	27.8 ± 0.29	27.45 ± 0.23	28.98 ± 0.18 ****
cTnT 100C - Tm 279C	24.8 ± 0.08	24.78 ± 0.11	24.78 ± 0.25
cTnT 100C - Tm 13C	27.17 ± 0.16	27.72 ± 0.53	28.24 ± 0.34
cTnT 127C - Tm 265C	28.87 ± 0.34	29.03 ± 0.40	28.15 ± 0.44
cTnT 127C - Tm 271C	28.38 ± 0.32	30.64 ± 0.99 **	27.55 ± 0.28
cTnT 127C - Tm 279C	30.30 ± 0.14	30.90 ± 0.09	30.16 ± 0.13

* : p < 0.05; ** : p < 0.01; ****: p < 0.0001 from WT

Table S2. Distances and significance via Tukey's multiple comparison test +/- SE between the FRET with calcium for WT, Tm D230N and cTnT R92L variants.

	WT	Tm D230N	cTnT R92L
cTnT 100C - Tm 265C	31.51 ± 1.06	30.44 ± 0.61	29.62 ± 0.49
cTnT 100C - Tm 271C	27.59 ± 0.20	26.69 ± 0.19 *	28.91 ± 0.23 ****
cTnT 100C - Tm 279C	25.45 ± 0.15	24.75 ± 0.12 *	24.57 ± 0.19 *
cTnT 100C - Tm 13C	26.78 ± 0.20	27.6 ± 0.41	27.33 ± 0.21
cTnT 127C - Tm 265C	31.62 ± 0.57	30.71 ± 0.16	30.60 ± 0.36
cTnT 127C - Tm 271C	29.54 ± 0.16	32.00 ± 0.28 ***	30.56 ± 0.26
cTnT 127C - Tm 279C	30.28 ± 0.11	31.34 ± 0.31 **	29.50 ± 0.12 *

* : p < 0.05; ** : p < 0.01; *** : p < 0.001;****: p < 0.0001 from WT