Pharmacological chaperoning of nicotinic acetylcholine receptors reduces the ER stress response

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Supplementary Figure 1. Data from NFRET measurements with biased transfection ratios support the idea that the NFRET, and fractional area of the fitted NFRET components, change monotonically with the ratio of $(\alpha 4)_2(\beta 2)_3$ to total $((\alpha 4)_2(\beta 2)_3$ and $(\alpha 4)_3(\beta 2)_2)$ nAChRs.

(A), NFRET images for representative cells transfected with 0.5 mole fraction plasmid ratios of $\beta 2$-eGFP and $\alpha 4$-mcherry. The false color runs from 0 to 0.2 NFRET. Scale bars, 5 µm.

(B), NFRET data for transfection with 0.67, 0.5, and 0.33 mole fraction plasmid ratios of $\beta 2$-eGFP. For each graph, the heavy line is the measured histogram. This is generally obscured by the blue curve, which sums the Gaussians fitted to the high and low NFRET components (dashed lines). The computed fractional area of high NFRET pixels ($W_{\text{high}}$) is shown in each case.

(C), Average NFRET and $W_{\text{high}}$ vs mole fraction of $\beta 2$ cDNA transfected, from the data in (B). The left y-axis gives mean NFRET. The standard errors are much smaller than the size of symbols, because each sample had $>10^6$ pixels. The right y-axis is $W_{\text{high}}$. 