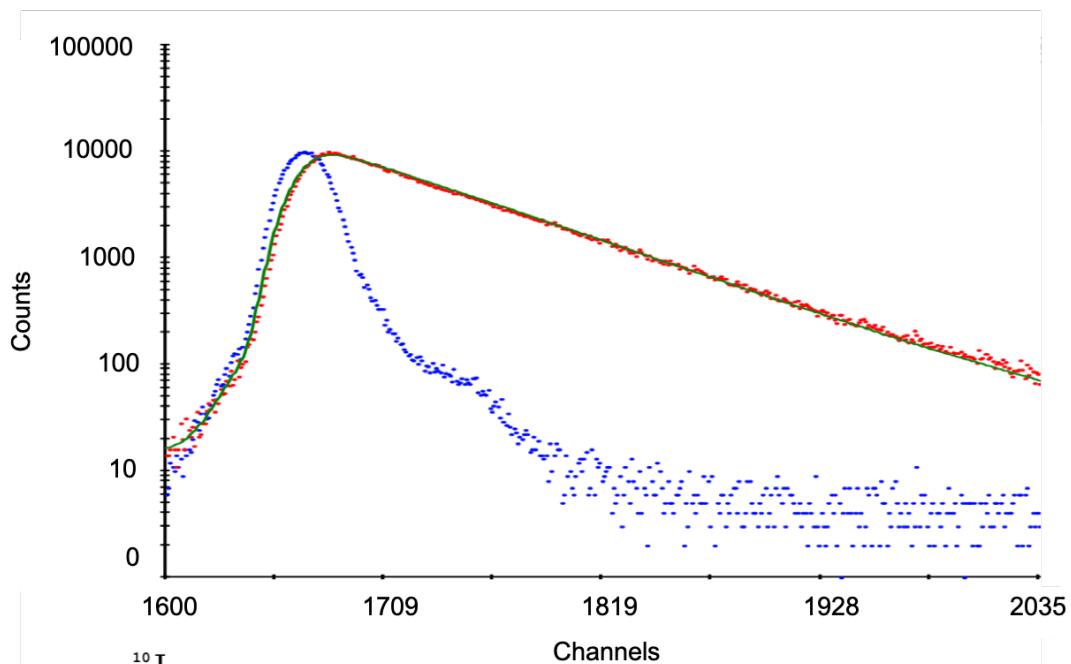
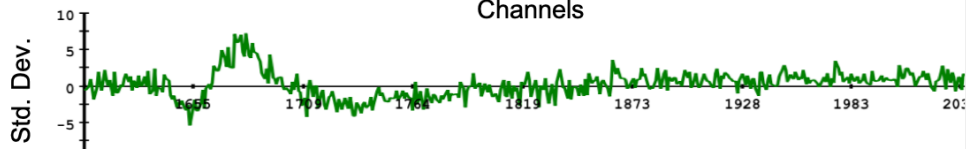


Figure S2: The exponential decay fitting process for (A): fluorescein (Donor) undergoing FRET to Cy3 (Acceptor) in Construct WT Δ L. The blue decay curve is instrument response. The red decay curve is for fluorescein in response to pulses at 495 nm. The solid green curve was a best fit by a biexponential curve corresponding to two lifetimes of 3.87 ± 0.01 (91.4%) and 0.89 ± 0.06 ns (8.6%). (B) Display of residuals derived from fit with a mono-exponential curve indicates a poor fit (CHISQ=2.67); (C) Display of residuals derived from fit with a biexponential curve indicates a better fit ($\chi^2 = 1.15$).

A



B



C

