

Supplementary Materials: Development, Characterization, and In Vivo Evaluation of a Novel Aptamer (Anti-MUC1/Y) for Breast Cancer Therapy

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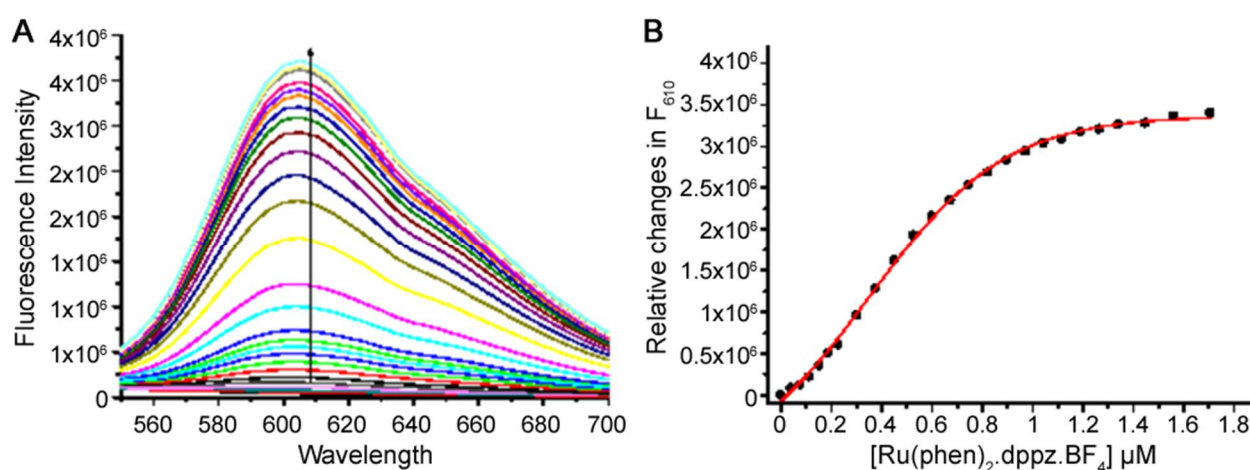


Figure S1. Ruthenium dye titrated into stock solution of aptamer. (A) Emission spectra of the titration (B) Fluorescence changes plot as function of the dye concentration.

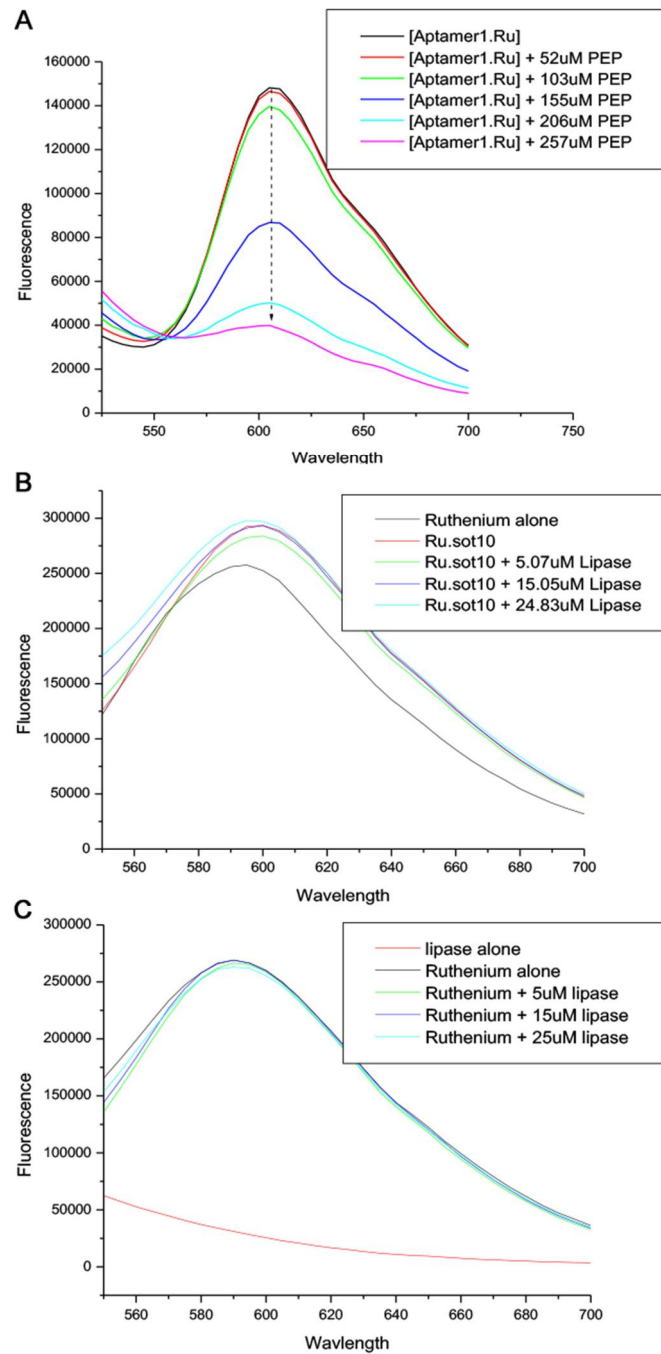


Figure S2. (A) The titration of Aptamer S11b with the VTR MUC1 sequence, where it takes a 100-fold more peptide to displace the ruthenium from this aptamer sequence, compared to the one required from the target MUC/Y peptide. (B) The effect of increasing concentrations of lipase on the fluorescence of free ruthenium is shown. Lipase was not shown to have an effect on the fluorescence of free ruthenium. (C) The effect of increasing concentrations of lipase on the fluorescence of ruthenium bound to an aptamer against MUC1/Y was investigated. Lipase showed no significant effect on the fluorescence of the aptamer-bound ruthenium, indicating no significant binding between the aptamer (variable region of Aptamer) and the protein.

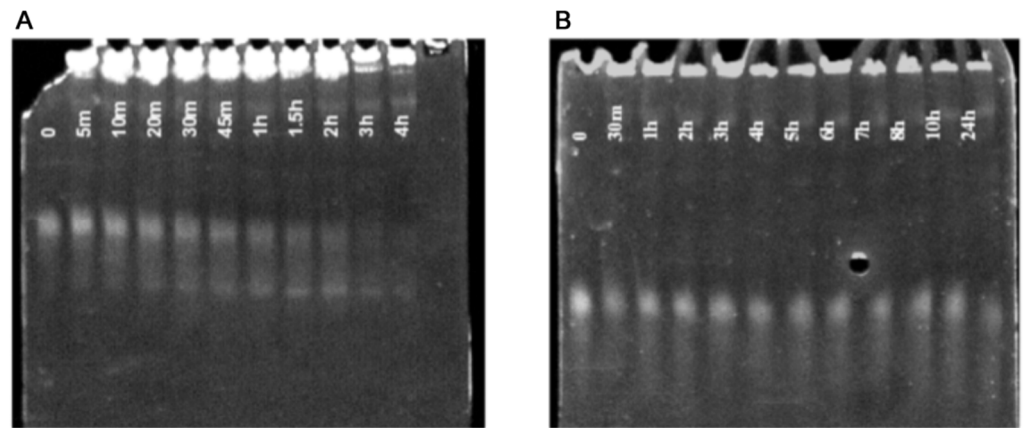


Figure S3. PAGE analysis of S11b degradation in mouse (A) and human serum (B).