Supplemental Material for:

Improved Synthesis and In Vitro Evaluation of an Aptamer Ribosomal Toxin Conjugate

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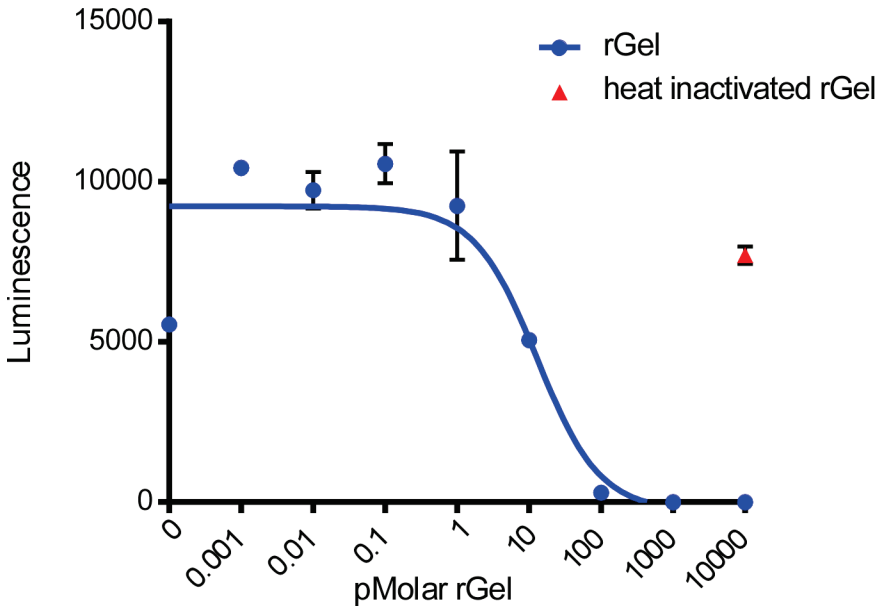

Figure S1: Activity of rGel following expression and purification, as assessed by inhibition of luciferase mRNA expression in a rabbit reticulocyte assay. The toxin was incubated with rabbit reticulocyte lysate at increasing concentrations (blue) prior to the addition of luciferase mRNA. Decreasing luminescence suggests a decrease in luciferase production as a result of inactivated ribosomes. To inactivate the toxin (red), rGel was boiled at 99°C prior to incubation with the lysate, inhibiting the toxins ability to cleave the ribosomal RNA.

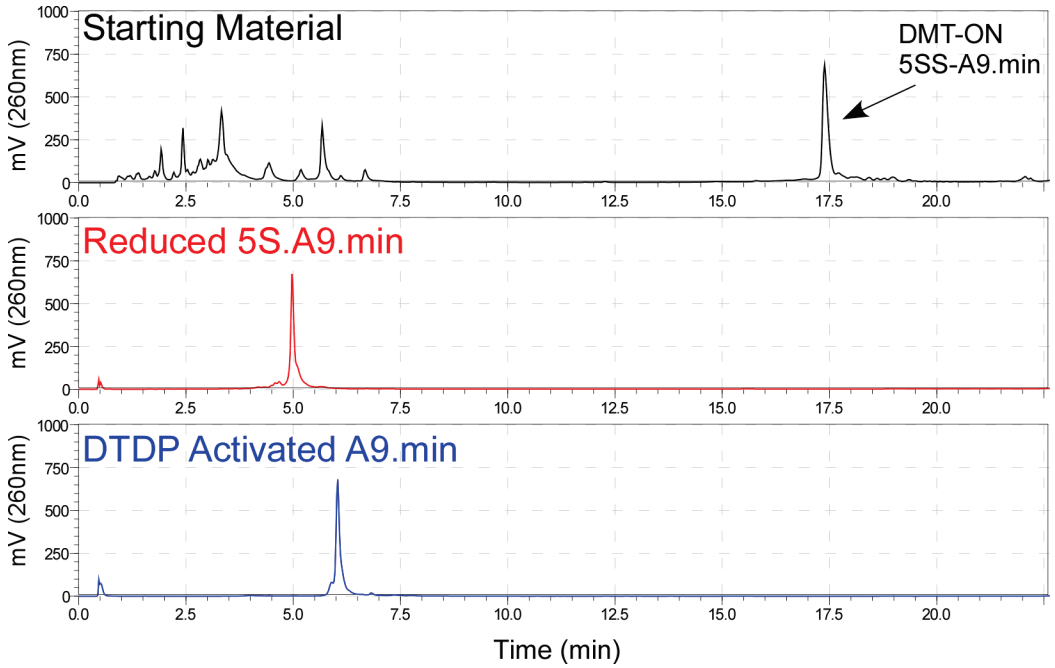

Figure S2: HPLC traces of aptamer during purification and activation. (Top) Analytical analysis of DMT-ON A9.min synthesized bearing a 5' thiol modification protected as a disulfide and a 3' inverted dT residue (DMT-ON 5SS-A9.min). The identity of the full length product is as indicated. **(Middle)** Analysis of the purified, reduced A9.min (5S.A9.min). Reduction of the aptamer was performed as described in the **Methods and Materials**. **(Bottom)** Analysis of 5S.A9.min following activation with dithiodipyridine. The remainder of the reaction was desalted to remove the excess DTDP and then used for protein conjugation as described in the **Methods and Materials**.