

Supplemental Material for:

Disparate HDV Ribozyme Crystal Structures Represent Intermediates on a Rugged Free Energy Landscape

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Running Title: Unifying model of HDV ribozyme catalysis

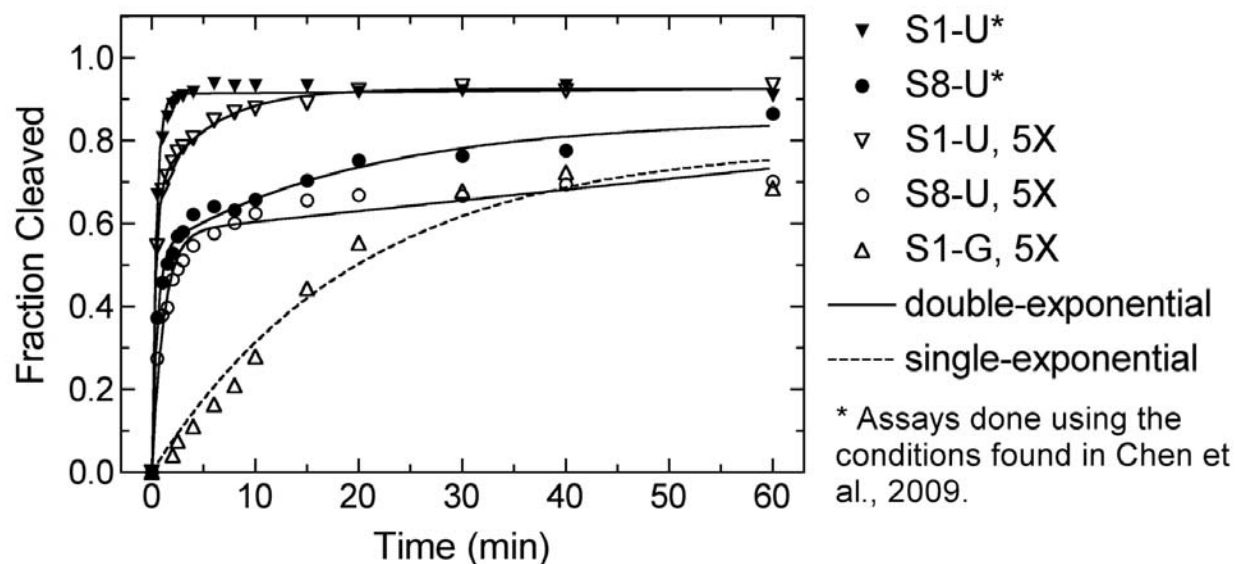


Fig. S1. Additional cleavage assays at a higher ribozyme concentration. The asterisk (*) denotes cleavage assays following the protocol by (Chen et al. 2009), described in the Materials and Methods section of the main text. The 5X denotes the use of ribozyme at a concentration 5-fold greater than that used for assays in the main text.

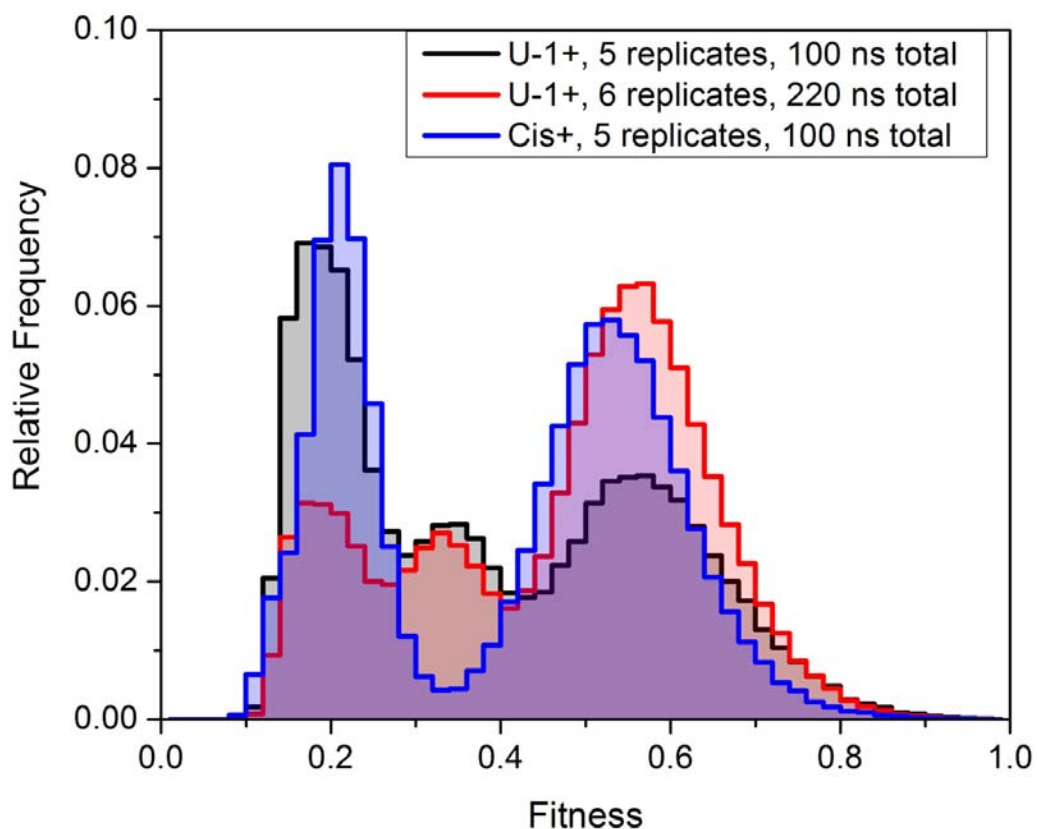


Fig. S2. Probability density histograms of in-line fitness values for U-1+ and Cis+ simulations. For U-1+, histograms were made for the first 5 replicates (first 20 ns from each) as well as for all 6 trajectories together (including trajectory 6 of 120 ns length). For Cis+, there are 5 replicates of 20 ns each and all of these data were used to generate the histogram.

References

Chen, JH, Gong, B, Bevilacqua, PC, Carey, PR, Golden, BL. 2009. A catalytic metal ion interacts with the cleavage Site G.U wobble in the HDV ribozyme. *Biochemistry* **48**: 1498-1507.