

SUPPLEMENTAL INFORMATION FOR

2'-Fluoro Substituents Can Mimic Native 2'-Hydroxyls within Structured RNA

Marcello Forconi,^{1,2,6} Jason. P. Schwans,^{1,3,6} Rishi H. Porecha,¹ Raghuvir
N. Sengupta,^{1,3} Joseph A. Piccirilli,^{3,5,*} and Daniel Herschlag^{1,4,*}

¹ Biochemistry Department, Stanford University, Stanford, California 94305

² Department of Chemistry and Biochemistry, College of Charleston, Charleston, South
Carolina 29401

³ Department of Chemistry, University of Chicago, Chicago, Illinois 60637

⁴ Chemistry Department, Stanford University, Stanford, California 94305

⁵ Department of Biochemistry and Molecular Biology, University of Chicago, Chicago,
Illinois 60637

⁶ These authors contributed equally to the paper

Correspondence to: herschla@stanford.edu or jpicciri@uchicago.edu

SUPPLEMENTAL DATA

TABLE S1, related to Table 1. Binding and reactivity of AUCG with closed complexes of different ribozymes, using the -1d,rSA or the -1d,rSA₅ substrates.

Numbers in parentheses represent the values relative to the A261OH ribozyme.

ribozyme	-1d,rSA, pH 6.5		-1d,rSA₅, pH 8.1	
	$(K_d^{\text{AUCG}})_c$ (μM)	k_c (min^{-1})	$(K_d^{\text{AUCG}})_c$ (μM)	k_c (min^{-1})
A261OH	0.58 ± 0.10 (1.0)	0.076 (1.0)	3.4 (1.0)	1.0 (1.0)
A261F	0.64 ± 0.06 (1.1)	0.017 (0.22)	4.0 (1.2)	0.24 (0.24)
A261H	3.2 ± 0.4 (5.5)	0.0040 (0.053)	31 (9.1)	0.023 (0.023)