

SUPPLEMENTAL INFORMATION FOR:

Nucleoside modifications modulate activation of the protein kinase PKR in an RNA structure-specific manner

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1.) One Supplemental Figure

Figure S1. Filter binding studies of modified ssRNA-47s with K296R.

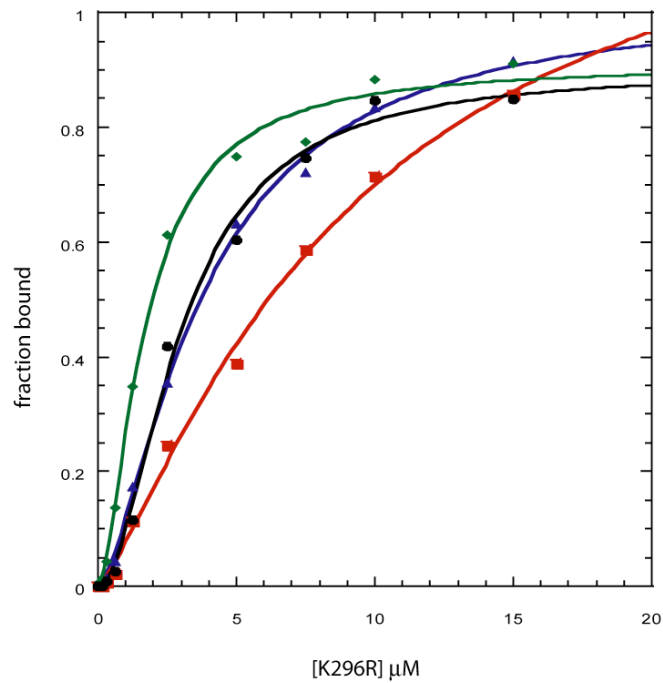


Figure S1: Filter binding studies of modified ssRNA-47s with K296R. Trace amounts of 5'-³²P labeled unmodified and modified ssRNA-47 were mixed with K296R and subjected to filter binding as described in the Materials and Methods. Experiments were in the presence of 0.1 mg/mL tRNA. Concentrations of K296R were 0, 0.04, 0.08, 0.16, 0.32, 0.62, 1.25, 2.5, 5, 7.5, 10 and 15 μM . Non-linear curve fitting to Equation 1 gave dissociation constant (K_d) and Hill coefficient (n) values as follows: unmodified ssRNA-47 (\blacktriangle) $3.8 \pm 0.2 \mu\text{M}$ and 1.5; pseudouridine (ψ)- substituted ssRNA-47 (\blacksquare) $9.2 \pm 1.9 \mu\text{M}$ and 1.2; 4-thiouridine (s4U)-substituted ssRNA-47 (\blacklozenge) $1.7 \pm 0.1 \mu\text{M}$ and 1.6; and 5-methyluridine (m5U)-substituted ssRNA-47 (\bullet) $3.0 \pm 0.2 \mu\text{M}$ and 1.9.