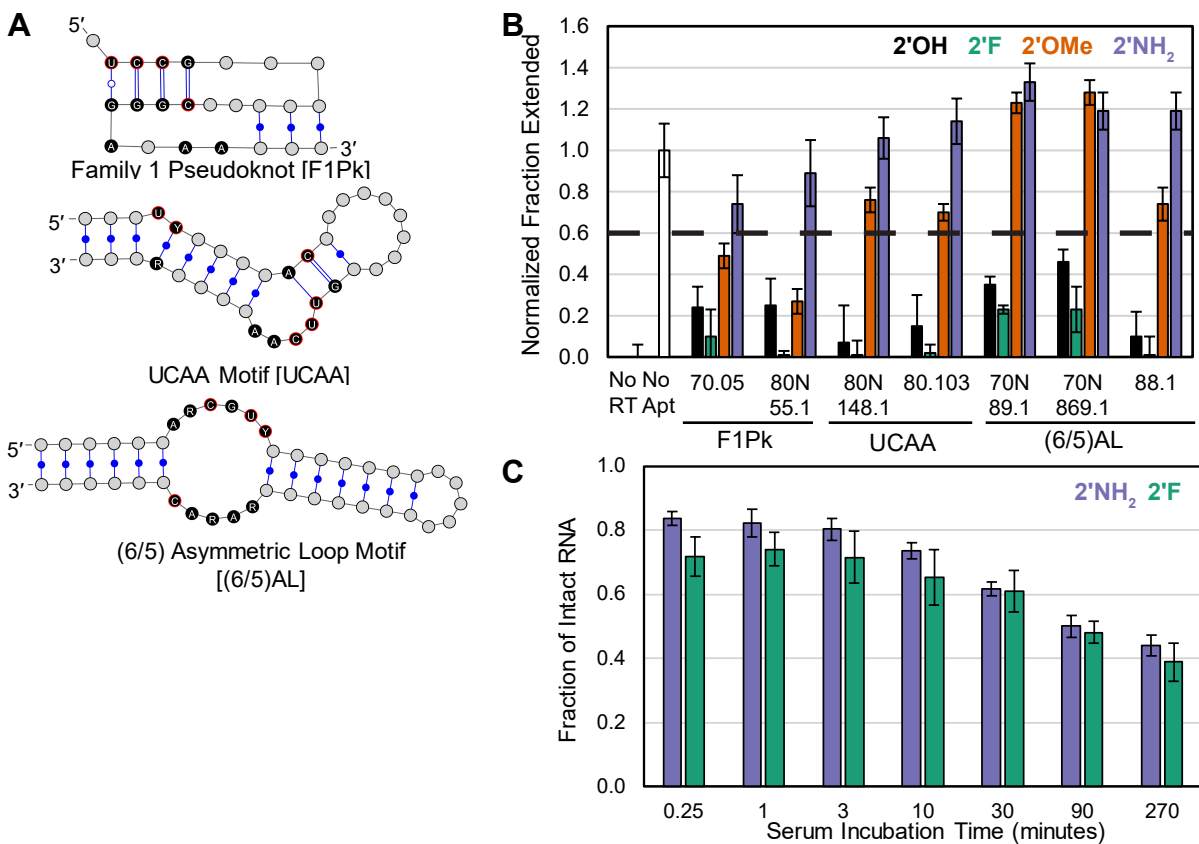


**Figure S1**

**Figure S1. Effect of 2' Modifications on Inhibition of HIV-1 RT by Anti-HIV-1 RT RNA Aptamers.** (A) Representations of the characteristic secondary structural features of these three classes of RT aptamers: family 1 pseudoknot (F1Pk), UCAA motif (UCAA) and (6/5) asymmetric loop motif [(6/5)AL]. Highly conserved nucleotides are shown in black. Positions marked with R or Y are purines or pyrimidines, respectively. (B) Quantification of primer extension assays showing fraction of primer converted into full-length in control reactions in the absence of RT (No RT) or aptamer (No Apt) and in reactions containing various full-length RNA aptamers belonging to the F1Pk, UCAA and (6/5)AL structural motifs. Aptamers were transcribed using either 2'-OH (black), 2'-F (green), 2'-OMe (orange) or 2'-NH<sub>2</sub> (purple) pyrimidines (n = 4). (C) Quantification of serum nuclease assays performed against an RNA aptamer (70N 1.1) transcribed with 2'-F or 2'-NH<sub>2</sub> pyrimidines and incubated in DMEM media + 10% fetal bovine serum for the indicated period of time (n = 3).