

Fig. S1. MOV10 does not block HIV-1 replication in target cells.

293T cells were transfected with pcDNA3.1 (control, Ctrl), pcDNA-MOV10, or pcDNA-rhTRIM5alpha (rhesus monkey TRIM5a gene). These cells were then infected with equal amounts of HIV-1 reporter viruses (pNL-Luc) pseudotyped with VSV-G and viral infectivity was determined by measuring cellular luciferase activity.

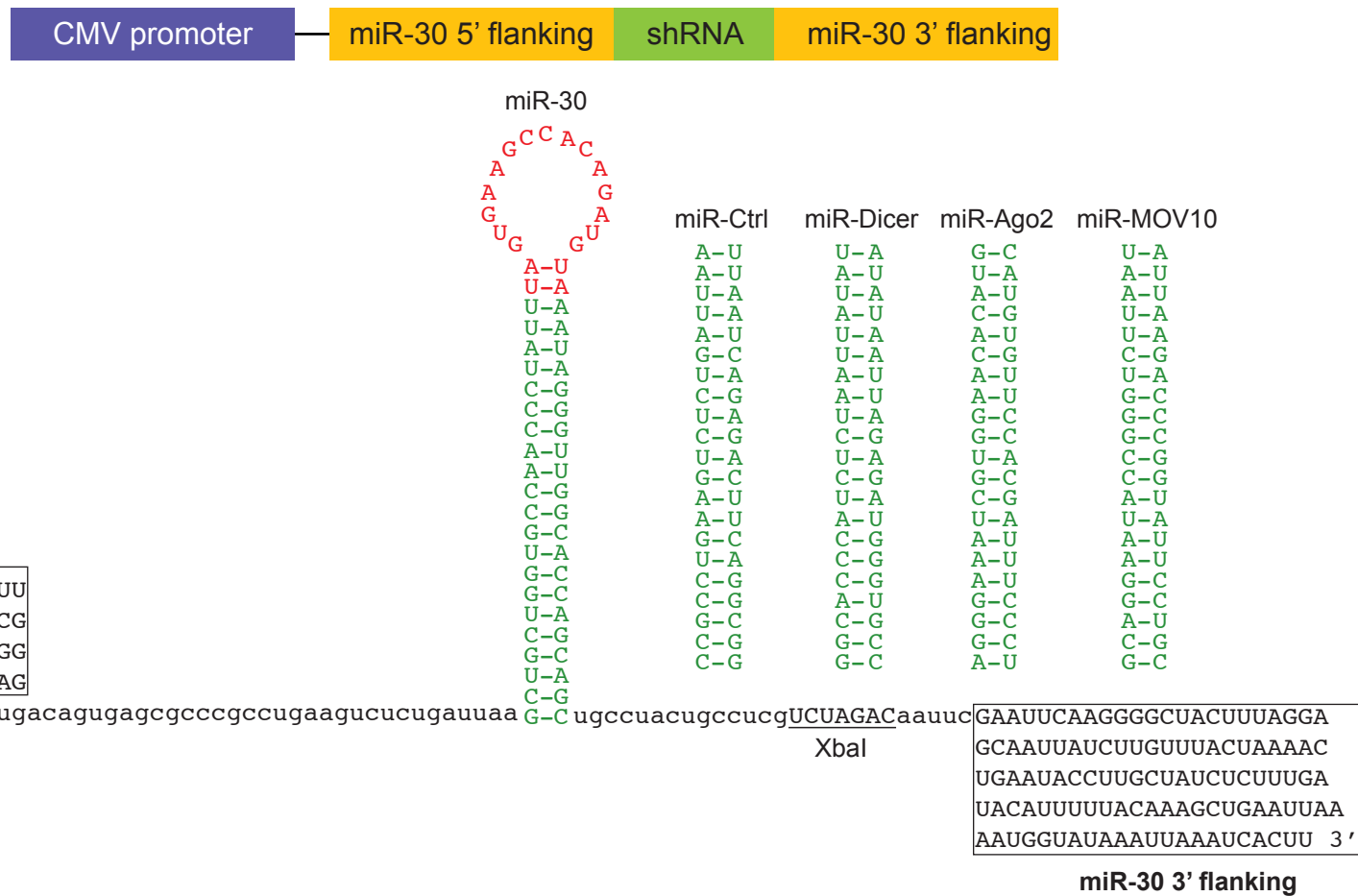


Fig. S2. Schematic representation of a miR30 precursor expression cassette in the pcDNA3.1 expression vector.

miR-30 5' and 3' flanking as well as its stem-loop sequences are listed below. Its 21-nucleotide stem sequences is presented in green and its 19-nucleotide loop sequence is presented in red. In addition, a Dicer, Ago2, or MOV10-specific as well as an unrelated (Ctrl) stem sequence is also presented in green. Two restriction enzyme sites (MluI and XbaI) are indicated for cloning these different stem-loop sequences.

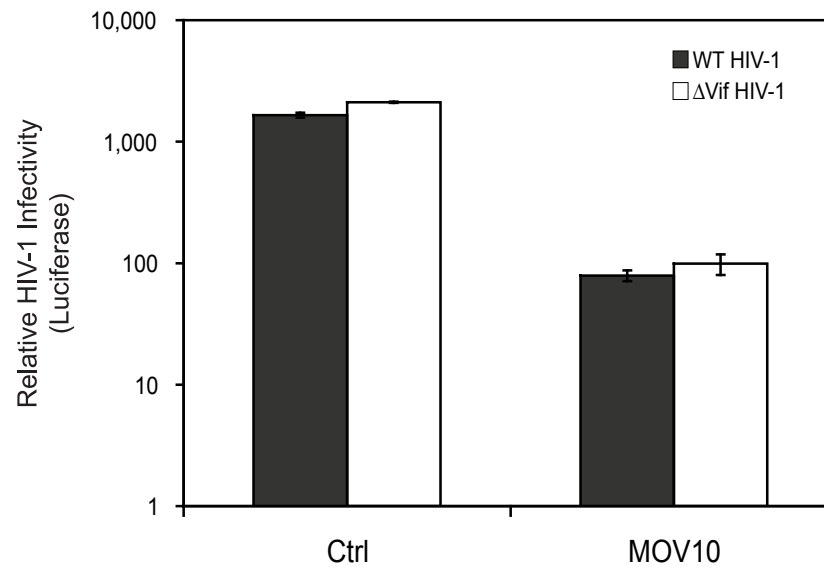


Fig. S3. MOV10 inhibits wild-type and Δ Vif HIV-1 at an equal efficiency.

Wild type or Δ Vif HIV-1 luciferase reporter viruses were produced from 293T cells in the presence of pcDNA-MOV10 or pcDNA3.1 (Ctrl) vector. After normalization of virus input by ELISA, equal amounts of viruses were used to infect GHOST cells. Viral infectivity was determined by measuring cellular luciferase activity.

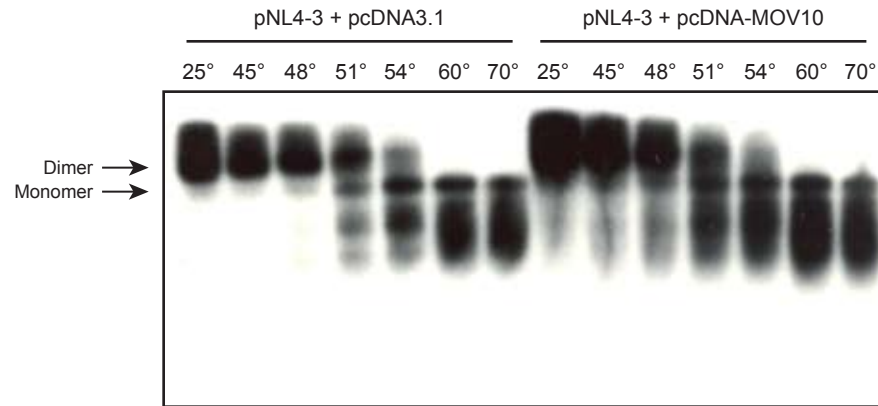


Fig. S4. MOV10 does not affect viral RNA packaging and dimerization.

Results show melting curves of HIV-1 dimeric RNAs from equal amounts (based on p24^{Gag}) of virions produced from 293T cells in the presence of a control vector (pcDNA3.1) or MOV10-expression vector (pcDNA-MOV10). Viral RNA pelleted from ethanol suspension was dissolved in a buffer containing 10 mM Tris (pH 7.5), 1 mM EDTA, 1% SDS, and 100 mM NaCl and analyzed by nondenaturing Northern (RNA) blot analysis. In these experiments, ³²P-labeled HIV-1 riboprobes were generated from a subclone of the pNL4-3 clone of HIV-1. The subclone extended from the SpeI site at nucleotide 1507 to the Sall site at nucleotide 5785, inserted between the SpeI and Sall sites of pBluescript KS+ (Stratagene, La Jolla, Calif.). The subclone was linearized with SpeI and transcribed with T3 polymerase kit following the manufacturer's instructions (Promega, Madison, Wis.).