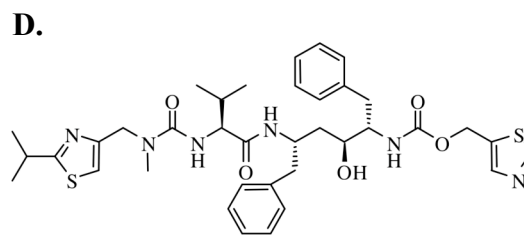
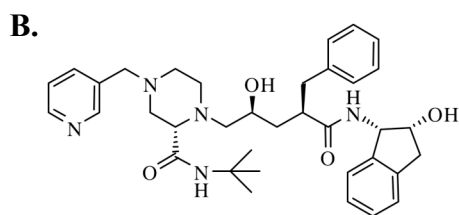


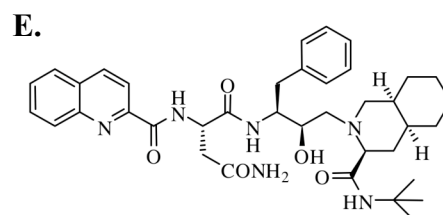
Darunavir (DRV)



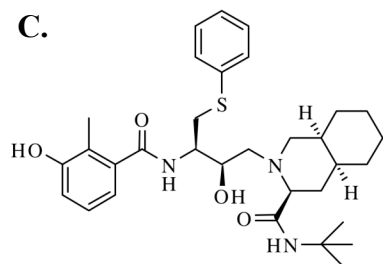
Ritonavir (RTV)



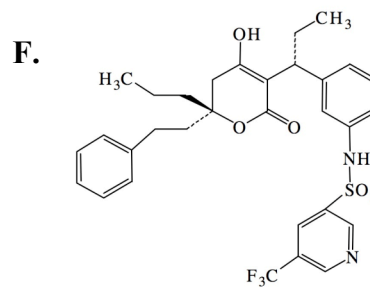
Indinavir (IDV)



Saquinavir (SQV)



Nelfinavir (NFV)

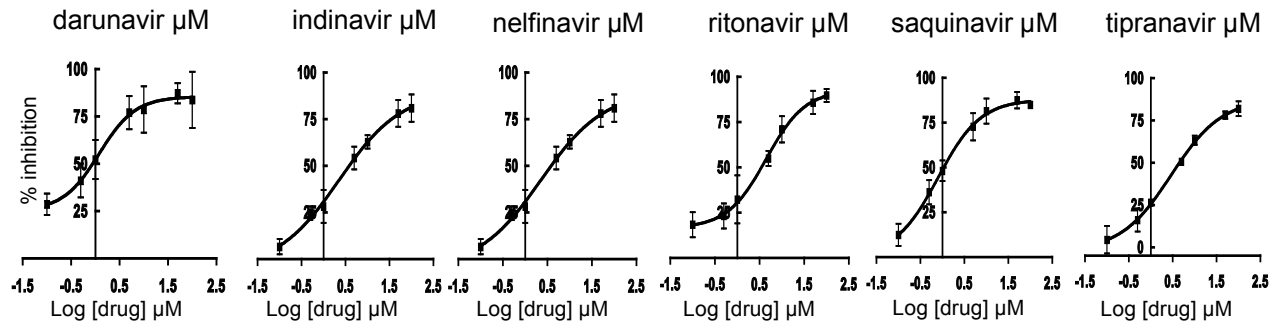


Tipranavir (TPV)

**Supplemental figure 1** : Structures for the six HIV-1 protease inhibitors used in this study.

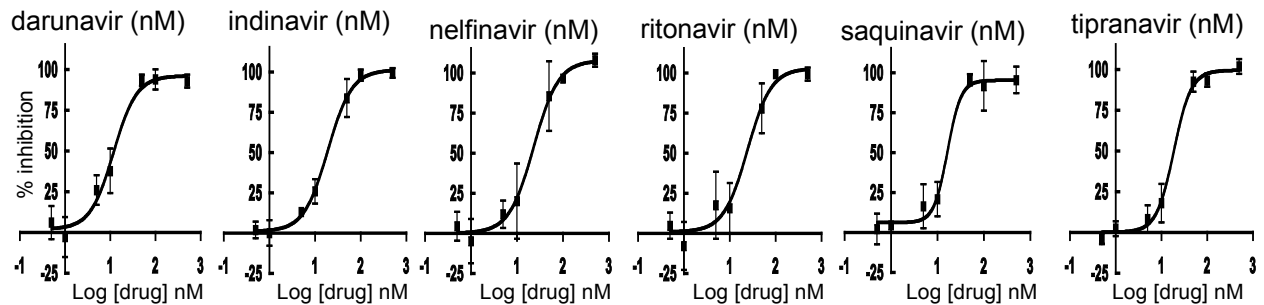
## A

### Endogenous protease assay

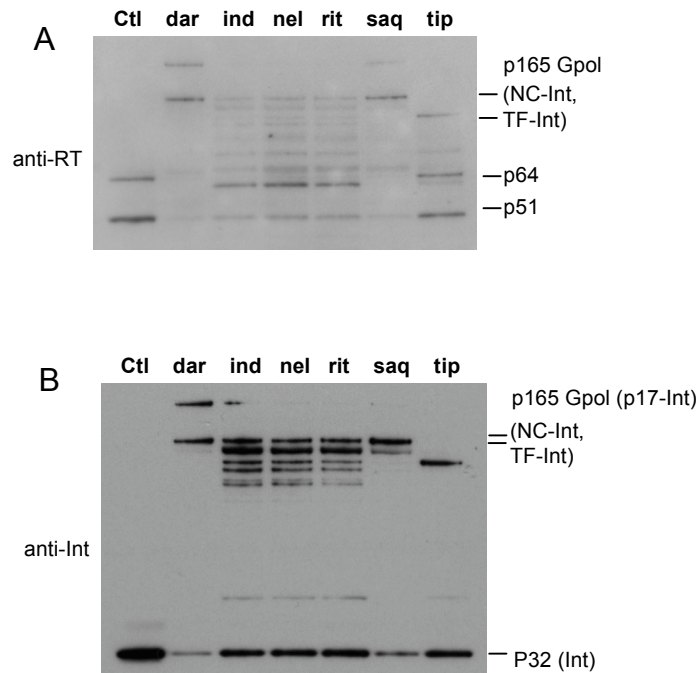


## B

### Exogenous protease assay



**Supplemental figure 2 :** Dose response curves for each drug in the endogenous (A) and exogenous (B) protease assay. All drugs were tested 3 times except tipranavir in the exogenous assay (2 times). The resultant curves were obtained using the sigmoidal non-variable slope dose-response equation in Prism 4. Each point represents the mean  $\pm$  the standard deviation of 3 separate experiments except tipranavir the curve is the average of 2 experiments and the error bars show the range of deviation.



**Supplemental Figure 3. Inhibition of HIV-1 Gag and Gag-Pol polyprotein processing in the presence of HIV-1 protease inhibitors.** H9 cells chronically infected with HIV-1 were treated for 3 days with vehicle (<0.05% DMSO) or 3.3  $\mu$ M of the indicated inhibitor. The supernatant was collected and virus pelleted by ultracentrifugation. The viral pellets were analyzed by Western blot with A) a monoclonal antibody to HIV-1 reverse transcriptase, shown is one representative blot from 2 separate experiments with similar results B) a monoclonal antibody to HIV-1 integrase, shown is one representative blot from 2 separate experiments with similar results. The locations for p165 Gag-Pol, NC-Int, TF-Int, RT subunits (p64 and p51), and integrase (Int) are indicated. (Ctl, control)