



Product Information Sheet

Product Name:	HIV-1 Protease, Recombinant
Catalog Number:	AS-72028-5
Size:	5 µg
Concentration:	0.2 mg/ml
Activity (Unit/µg):	The activity unit is labeled on the vial.
Unit definition:	One unit of protease hydrolyzes 1 picomole of the DABCYL/EDANS substrate in SensoLyte™ 490 HIV Protease Assay Kits (AnaSpec Cat# 71127) per min at pH 4.7 at 25°C.
Storage:	Store at -80°C. Avoid multiple thaw-freeze cycles.

Description:

The 10~12 kD aspartic protease of human immunodeficiency virus-1 (HIV-1), active only when it forms a homodimer, is required for the post-translational cleavage of the precursor polyproteins, Gag, Gag-Pol, Pol, and Nef¹. Since the cleavages of precursors are essential for the maturation of HIV infectious particles, this protease is one of the key targets for developing anti-AIDS drugs.

The recombinant HIV-1 protease (wild type, NCBI accession: NC_001802) contains the 99 amino acid sequence as reported by Schneider, *et al.*,² with 6x His-tag at its C-terminal. 100-200 ng of HIV-1 protease per well (96-well plate) is sufficient for FRET-based activity assays (SensoLyte™ 490 and 520 HIV Protease Assay Kits, AnaSpec Cat#71127, 71147).

References:

1. Seelmeier, S. et al. *Proc. Natl. Acad. Sci. USA*. **85**, 6612 (1988).
2. Schneider, J. and SB. Kent, *Cell* **54**, 363 (1988).