

Product Information Sheet

Product Name: HIV-1 Protease, Recombinant

Catalog Number: AS-72028-5

Size: $5 \mu g$

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 SensoLyteTM 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 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).