

## PRODUCT DATA SHEET

### HIV-1 Protease E.coli

**Cat. No.:** RH1P0001

**Size:** 0.1 mg

**Source:** E. coli

**Type:** Active protein

**Species:** Human Immunodeficiency Virus 1

#### Other Names:

#### Description:

Total 99 AA. MW: 10.8 kDa (monomer), protein active as dimer

#### Amino Acid Sequence:

PQITLWQRPL VTIKIGGQLK EALLDTGADD TVLEEMNLPG RWKPKMIGGI GGFIVRQYD  
QILIEICGHK AIGTVLVGPT PVNIIGRNLL TQIGCTLNF

#### Purity:

Purity as determined by densitometric image analysis: >90%

#### Formulation:

20 mM sodium acetate, 200 mM NaCl, 10% glycerol, 0.05% 2-mercaptoethanol, 1 mM EDTA, pH 5.0

#### Reconstitution:

Defrost at ambient temperature.

#### Shipping:

On ice. Upon receipt, store the product at the temperature recommended below.

#### Storage/Stability:

Store protein at -80°C. Protein remains stable until the expiry date when stored at -80°C. Avoid repeated freezing/thawing cycles.

#### Quality Control:

SDS PAGE to determine purity of the protein.  
Active site titration by tightly binding inhibitor.

#### Applications:

Crystallography, Inhibitor screening, Kinetic studies

#### Note:

$K_m = 15.1 \mu\text{M}$   $K_{cat} = 30 \text{ s}^{-1}$   $K_{cat} / K_m = 1981 \text{ mM}^{-1} \text{ s}^{-1}$  with peptide substrate KARVF(NO<sub>2</sub>)VRKA (F(NO<sub>2</sub>) ... p-nitrophenylalanine)