

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 GGFVKVRQYD
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(NO₂)VRKA (F(NO₂) ... p-nitrophenylalanine)