9051 Mira Mesa Blvd, #910094
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HIV-1 Protease

HIV-1 Protease Recombinant
VAG0335

Product Overview

Name	HIV-1 Protease

Description

HIV-1 Protease Recombinant

Introduction

HIV-1 protease is very significant in the life cycle of the HIV virus. It is expressed in the infected cells as a part of Gag-Pol polyprotein from which it is auto-catalytycaly released after formation of an immature viral particle. The enzyme subsequently cleaves the other parts of viral polyproteins resulting in the maturation of the virus. In HIV-infected patients the enzyme is subjected to intensive mutagenesis and mutants resistant to applied medicines are produced as a result of the selection pressure.

Source

Escherichia Coli.

Physical Appearance

Sterile filtered colorless clear solution.

Formulation

The HIV-1 Protease filtered (0.4 µm) solution is formulated in 20mM Tris, 20mM MES, 200mM NaCl, 1mM EDTA, 10% (v/v) glycerol and 0.05% 2-mercaptoethanol, pH 6.5.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino acid sequence

PQITLWQRPL VTIKIGGQLK EALLDTGADD TVLEEMNLPG RWKPKMIGGI GGFIKVRQYD QILIEICGHK AIGTVLVGPT PVNIIGRNLL TQIGCTLNF.

Kinetic parameters

Km=15.1 µM, Kcat = 30s-1, Kcat/Km= 1981 mM-1s-1 with peptide substrate KARVF (NO2)VRKA (F(NO2) ... p-nitrophenylalanine).

Precautions

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HIV-1 Protease is for research use only and not for use in diagnostic or therapeutic procedures.