

HIV-2 Protease Fluorometric Activity Assay Kit

Product Information

Cat.No.

Kit-2131

Product Overview

HIV-2 Protease Activity assay kit utilizes the ability of active HIV- 2 Protease to cleave a synthetic peptide substrate to release the free fluorophore which can be easily quantified (Ex/Em = 330/450 nm) using a fluorometer or fluorescence microplate reader. This assay is simple, rapid and can detect HIV-2 protease activity in samples and of purified enzyme.

Size

100 assays

Description

Human Immunodeficiency Virus (HIV) is the cause of the Acquired Immunodeficiency Syndrome (AIDS). Infection with HIV-2 virus causes immunosuppression, as well as AIDS, characterized by the same signs, symptoms and opportunistic infections as HIV-1. However, HIV-2- associated AIDS may often be associated with lower viral load levels than HIV-1. Aspartyl HIV-2 Protease (retropepsin) is an essential enzyme for the life-cycle of HIV virus. Expressed as a part of the Gag-Pol polyprotein complex in the infected cells, it is auto-catalytically released upon 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.

Applications

Detect activity of recombinant HIV-2 protease
Determine activity of purified HIV-2 protease

Storage

Store kit at -80°C, protected from light. Briefly centrifuge small vials at low speed prior to opening. Read the entire protocol before performing the assay. HIV-2 Protease Assay and Dilution Buffers: Bring to room temperature before use. Store at -20°C. HIV-2 Protease: Add 20 µl of HIV Protease Dilution Buffer to the vial. Aliquot and store at -80°C. Avoid repeated freeze/thaw.

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Kit Components

HIV-2 Protease Assay Buffer: 25 ml HIV-2 Protease Dilution Buffer: 1 ml HIV-2 Protease Substrate: 0.2 ml HIV-2 Protease (Positive Control): 20 µl FI. Standard (10 mM in DMSO): 20 µl

Detection method Fluorescence (Ex/Em = 330/450 nm)

Compatible Sample Types

Proteins/lysates

Features & Benefits

- Simple, sensitive assay
- Fluorometric detection