



Recombinant HIV type 1 Protease Protein (21.6kDa) (DAG1545)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	HIV-1 protease is an active homodimer having a molecular mass of 21.6kDa (each monomer of 99 amino acids is 10.8kDa).
Antigen Description	HIV-1 protease (HIV PR) is a retroviral aspartyl protease (retropepsin) that is essential for the life-cycle of HIV, the retrovirus that causes AIDS. HIV PR cleaves newly synthesized polyproteins at the appropriate places to create the mature protein components of an infectious HIV virion. Without effective HIV PR, HIV virions remain uninfected. Thus, mutation of HIV PR's active site or inhibition of its activity disrupts HIV's ability to replicate and infect additional cells, making HIV PR inhibition the
Species	HIV
Purity	N/A
Conjugate	Unconjugated
Format	Sterile filtered colorless clear solution.
Concentration	0.25mg/1ml
Size	10 µg, 1 mg
Buffer	formulated in 20mM acetate, 200mM NaCl, 1mM EDTA, 0.5mM DTT, pH5.0 and 10% glycerol.
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction

The human immunodeficiency virus (HIV) is a lentivirus (slowly replicating retrovirus) that causes the acquired immunodeficiency syndrome (AIDS), a condition in humans in which progressive failure of the immune system allows life-threatening opportunistic infections and cancers to thrive. Without treatment, average survival time after infection with HIV is estimated to be 9 to 11 years, depending on the HIV subtype. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, pre-ejaculate, or breast milk. Within these bodily fluids, HIV is present as both free virus particles and virus within infected immune cells.

Keywords

HIV-1 protease; Human immunodeficiency virus protease; PR; Retropepsin; HIV protease