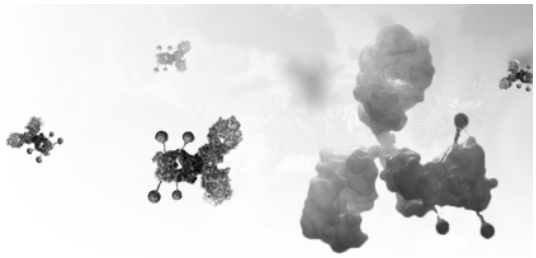

Recombinant HIV Protease (a.a. 1-185) (DAG-P2206)

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

PRODUCT INFORMATION

Product Overview	Active HIV protease protein fragment
Antigen Description	The HIV1 core consists of a viral genome housed within a conical viral capsid that is generated during virion maturation. Human immunodeficiency virus type 1 (HIV1) matures after the viral protease processes the Gag and Pol polyproteins at 10 substrate locations. The protease of HIV1 is an aspartic protease and is functional only as a dimer; dimerization results in the formation of a binding cleft in which each of the two catalytic aspartic acids in which each monomer contributes each of the 2 catalytic aspartic acids. Because the protease is active only as a dimer, two of the GagPol precursors must themselves dimerize during virus assembly so that their protease domains can dimerize, become active, and process the precursors. Both the order and kinetics of cleavage as well as the extent of precursor processing appear to be critical steps in the generation of fully infectious, appropriately assembled viral particles. Inhibition of HIV-1 protease represents an important avenue for antiviral therapy. Currently available combination chemotherapy with reverse transcriptase inhibitors (RTIs) and protease inhibitors (PIs) for human immunodeficiency virus type 1 (HIV1) infection and AIDS have been shown to suppress the replication of HIV1 and extend the life expectancy of HIV1 infected individuals.
Species	HIV
Conjugate	Unconjugated
Applications	FuncS
Molecular Weight	12 kDa
Bio-activity	One unit of protease hydrolyzes 1 picomole of the DABCYL/EDANS substrate per min at pH 4.7 at 25°C.
Format	Liquid

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Buffer	pH: 6.00Constituents: 0.39% MES, 3.72% Potassium chloride, 20% Glycerol
Preservative	None
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze/thaw cycles.

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

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