

Recombinant HIV-1 p66 pol

Catalog No.	CSI15818A	Quantity:	2 µg
	CSI15818B		10 µg
	CSI15818C		100 µg

Description: Human immunodeficiency virus (HIV) is a retrovirus that can lead to a condition in which the immune system begins to fail, leading to opportunistic infections. HIV primarily infects vital cells in the human immune system such as helper T cells (specifically CD4+ T cells), macrophages and dendritic cells. HIV infection leads to low levels of CD4+ T cells through three main mechanisms: firstly, direct viral killing of infected cells; secondly, increased rates of apoptosis in infected cells; and thirdly, killing of infected CD4+ T cells by CD8 cytotoxic lymphocytes that recognize infected cells. When CD4+ T cell numbers decline below a critical level, cell-mediated immunity is lost, and the body becomes progressively more susceptible to opportunistic infections. HIV was classified as a member of the genus *Lentivirus*, part of the family of *Retroviridae*. Lentiviruses have many common morphologies and biological properties. Many species are infected by lentiviruses, which are characteristically responsible for long-duration illnesses with a long incubation period. Lentiviruses are transmitted as single-stranded, positive-sense, enveloped RNA viruses. Upon entry of the target cell, the viral RNA genome is converted to double-stranded DNA by a virally encoded reverse transcriptase that is present in the virus particle. This viral DNA is then integrated into the cellular DNA by a virally encoded integrase so that the genome can be transcribed. Once the virus has infected the cell, two pathways are possible: either the virus becomes latent and the infected cell continues to function, or the virus becomes active and replicates, and a large number of virus particles are liberated that can then infect other cells.

HIV-1 p66 Recombinant- is a 66 kDa protein derived from pol gene. The HIV-1 p66 is glycosylated with N-linked sugars and produced using baculovirus vectors in insect cells.

Source: Baculovirus Insect Cells.

Molecular Weight: 66 kDa

Formulation: The HIV-1 p66 pol protein solution contains 30 mM Tris pH-7 + 0.15 M NaCl + 0.2 mM EDTA and 2 mM β-ME.

Purity: Greater than 90.0% as determined by HPLC analysis & SDS-PAGE.

Physical Appearance: Sterile filtered colorless clear solution.

Specific Activity: Immunoreactive with sera from HIV infected individuals.

Applications: HIV-1 p66 pol antigen is suitable for ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems.
Western blots: 0.1-1.0 µg/strip
ELISA: 0.05-0.25 µg/well.

Storage & Stability: Recombinant HIV-1 p66 although stable at 4°C for 3 weeks, should be stored desiccated below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please avoid freeze-thaw cycles.

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