

Recombinant HIV gag-pol protein

Cat. No. gag-pol-187H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	HIV-1 p66 Recombinant is a 71kDa protein derived from pol gene. The HIV-1 p66 is glycosylated with N-linked sugars and produced using baculovirus vectors in insect cells.
Species	HIV
Source	Insect Cells
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 <i>Lentivirus</i>, part of the family of <i>Retroviridae</i>. 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.

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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.

Form	Sterile filtered colorless clear solution. The protein solution contains 30mM Tris pH-7, 0.15M NaCl and 0.2mM EDTA.
Molecular Mass	71kDa
Purity	Greater than 90.0% as determined by HPLC analysis & SDS-PAGE.
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.
Usage	The products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.
Stability	Recombinant HIV-1 p66 although stable at 4°C for 3 weeks, should be stored 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.
Shipping	Ice Packs

GENE INFORMATION

Gene Name	gag-pol Gag-Pol [Human immunodeficiency virus 1]
Official Symbol	gag-pol

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Synonyms	gag-pol; Gag-Pol polyprotein; Gag-Pol Transframe peptide; aspartic peptidase; p66 subunit; integrase; reverse transcriptase p51 subunit; Pol
Gene ID	155348
Protein Refseq	NP_057849.4
UniProt ID	P04585

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