

## 32-5575: Recombinant HIV-1 p66 pol

### Description

Source : Baculovirus Insect Cells. 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. 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.

### Product Info

<b>Amount :</b>	10 µg
<b>Purification :</b>	Greater than 90.0% as determined by HPLC analysis & SDS-PAGE.
<b>Content :</b>	The protein solution (115µg/ml) contains 30mM Tris pH-7, 0.15M NaCl and 0.2mM EDTA.
<b>Storage condition :</b>	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.

