Recombinant HIV-1 p24 gag (aa 77-436)

Catalog No.	CSI15814A	**Quantity:**	100 µg
	CSI15814B		0.5 mg
	CSI15814C		1.0 mg

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), macrophage sand 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.
The *E. coli* derived 39 kDa recombinant protein is a non-glycosylated polypeptide chain, containing the HIV-1 p24 gag immunodominant regions, 77-436 amino acids.
The HIV-1 p24 gag is fused to beta-galactosidase (114 kDa).

Source: *E. coli*

Molecular Weight: 39 kDa

Formulation: 8 M urea + 20 mM Tris-HCl pH-8, and 10 mM β-mercaptoethanol.

Purity: Greater than 95.0% as determined by HPLC analysis and SDS-PAGE.

Physical Appearance: Sterile filtered colorless clear solution.

Amino Acid Sequence: SLYNTVATLY CVHQRIEIKD TKEALDKIKE EQNKSKKKAQ QAAADTGHSS QVSQNYPIVQ NIQGQMVHQA ISPRTLNAWV KVVEEKAFSP EVIPMFSALS EGATPQDLNT MLNTVGGHQA AMQMLKETIN EEAAEWDRVH PVHAGPIAPG QMREPRGSDI AGTTSTLQEQ IGWMTNNPPI PVGEIYKRWI ILGLNKIVRM YSPTSILDIR QGPKEPFRDY VDRFYKTLRA EQASQEVKNW MTETLLVQNA NPDCKTILKA LGPAATLEEM MTACQGVGGP GHKARVLAEA MSQVTNSATI MMQRGNFRNQ RKIVKCFNCG KEGHIARNCR APRKKGCWKC GKEGHQMKDC TERQANFLGK .

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HIV-1 p24 gag antigen in ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems.

Storage & Stability: HIV-1 Integrase although stable at 4°C for 1 week, should be stored below -18°C. **Please prevent freeze thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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