Recombinant HIV HIVP14 protein, His-tagged

Cat. No. HIVP14-178H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant HIV-1 p24 produced in E.coli is a non-glycosylated polypeptide chain having a molecular mass of 26.7kDa and fused to a His tag at N-terminus.
Species	HIV
Source	E.coli
Description	Human immunodeficiency virus (HIV) is a retrovirusthat can lead to a condition in which the immune systembegins to fail, leading to opportunistic infections. HIV primarily infects vital cells in the humanimmune systemsuch as helper T cells(specifically CD4+ T cells), macrophagesand 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 apoptosisin infected cells; and thirdly, killing of infected CD4+ T cells by CD8 cytotoxic lymphocytesthat recognize infected cells. When CD4+ T cell numbers decline below a critical level, cell-mediated immunityis 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 genomeis converted to double-stranded DNAby a virally encoded reverse transcriptasethat is present in the virus particle. This viral DNA is then integrated into the cellular DNA by a virally encoded

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	integraseso that the genome can be transcribed. Once the virus has infected the cell, two pathways are possible: either the virus becomes latentand 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 White lyophilized (freeze-dried) powder. Lyophilized from 1mg/ml in 20mM sodium carbonate pH-10.
Molecular Mass	26.7kDa
Purity	Greater than 95.0% as determined by SDS-PAGE.
Usage	The products are furnished for LABORATORY RESEARCH USE ONLY. They may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.
Stability	HIV-1 p24 although stable at room temperature for 4 weeks, should be stored below-18°C. Please prevent freeze thaw cycles.
Solubility	It is recommended to reconstitute the lyophilized HIV-1 p24 in sterile 18M-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA