Recombinant HIV gag protein

Cat. No. gag-186H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	HIV-1 p55 Recombinant is a 55kDa protein derived from gag gene of an HTLV-3/LAV isolate of HIV-1. The HIV-1 p55 is glycosylated with N-linked sugars and produced using baculovirus vectors in insect cells. The full length authentic p55 gag protein forms particles within itself of approximately 23nm in size (as determined by electron particles).
Species	HIV
Source	Insect Cells
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

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

	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 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 colorless clear solution. The HIV-1 p55 gag protein solution contains 10mM Tris pH 8, 140mM NaCl and 400mM L-Arginine.
Molecular Mass	55kDa
Purity	Greater than 90.0% as determined by HPLC analysis & SDS-PAGE.
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 p55 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.
Specificity	Immunoreactive with sera from HIV infected individuals.
Shipping	Ice Packs
Full Length	Full L.

GENE INFORMATION

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

Gene Name	gag Pr55(Gag) [Human immunodeficiency virus 1]
Official Symbol	gag
Synonyms	gag; Pr55(Gag); matrix; capsid; nucleocapsid; p2; p6; p1
Gene ID	155030
Protein Refseq	NP_057850.1
UniProt ID	P04591

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