

## HIV-1 p55 gag

**Description:** 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).

**Source:** Baculovirus Insect Cells.

**Physical Appearance:** Sterile filtered colorless clear solution.

**Purity:** Greater than 90.0% as determined by HPLC analysis & SDS-PAGE.

**Specificity:**

Immunoreactive with sera from HIV infected individuals.

**Formulation:**

The HIV-1 p55 gag protein solution contains 10mM Tris pH 8, 140mM NaCl and 400mM L-Arginine.

**Stability:**

Recombinant HIV -1 p55 although stable at 4°C for 3 weeks, should be stored desiccated 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.

**Usage:**

NeoBiolab's 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.

**Applications:**

HIV-1 p55 gag antigen is suitable for ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems.

**Introduction:**

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

www.neobiolab.com

info@neobiolab.com

888.754.5670, +1 617.500.7103 United States

0800.088.5164, +44 020.8123.1558 United Kingdom

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.



**To place an order, please [Click HERE](#).**

Catalog #:HIPS-137

For research use only.

© 2015 NeoScientific



neobiolab | [Term](#) | [Quote/Order](#) | [Services](#) | [Products](#) | [Support](#) | [Corporate](#) | [Contact Us](#)



Copyrights © 2013 NEO Group 245 First Street, 18th Floor, Cambridge MA 02142 888.754.5670 (toll-free)

Request a  
CATALOG  
[CLICK HERE](#)