

HIV-1 gp41 Recombinant Protein

Recombinant HIV-1 gp41, Biotin Labeled

CATALOG #
AAA38332

HOST
E Coli

PRODUCT SYNONYMS

HIV-1 gp41; Recombinant HIV-1 gp41; Biotin Labeled; Biotin; HIV-1 gp41 Recombinant; Biotin labeled; HIV-1 gp41 Biotin; HIV-1 gp41 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Specificity	Reacts with Human HIV positive serum.
Purity/Purification	Greater than 95.0% as determined by SDS-PAGE.
Form/Format	1mg/ml in 20mM Tris-HCl pH-8, 20mM B-ME and 8M urea. Sterile filtered colorless clear solution.
Preparation and Storage	HIV-1 gp41 Biotin although stable at 4°C for 1 week, should be stored below -18°C. Please prevent freeze thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for HIV-1 gp41 recombinant protein

Description: HIV-1 gp41 Biotin labeled is a non-glycosylated polypeptide chain, containing 288 amino acids (466-753 a.a.) and having a Mw of 32kDa. HIV1 gp41 biotin labeled is fused to a 114kDa beta-galactosidase tag at N-terminus having a total Mw of 146kDa.

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 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 Categories/Family for HIV-1 gp41 recombinant protein

Viral Antigens; HUMAN IMMUNODEFICIENCY VIRUS; Viral Antigens; HIV

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.