



Product Data Sheet

□ Cat # RP-546

Recombinant HIV-1 gp120 MN

Size: □ 2 ug

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.

Source of protein

HIV-1 gp120 MN Recombinant- is the external envelope protein, full-length 100-120 kDa, derived from the env. gene of HIV-1 and glycosylated with N-linked sugars and produced using baculovirus vectors in insect cells. Purified under conditions that maintain the tertiary structure of the molecule (>95% pure). It is supplied in a buffer 30mM Tris pH-7.6, 0.15M NaCl and 0.01% Triton x100 (lot sp. conc on the vial).

Recombinant HIV -1 gp120 MN 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.

Specificity: Immunoreactive with sera from HIV infected individuals. Western blots: 0.1-1.0 µg/strip.

Applications: Antigen in ELISA and Western blots, excellent antigen for early detection of HIV seroconvertors with minimal specificity problems.

This item is for LABORATORY RESEARCH USE ONLY.

Related items :

Catalog#	ProdDescription
RP-533	Recombinant HIV-1 Envelope (233)
RP-534	Recombinant HIV-1 gp120 nef Mosaic
RP-535	Recombinant HIV-1 p24 Core
RP-536	Recombinant HIV-1 p24
RP-537	Recombinant HIV-1 Envelope (288)
RP-538	Recombinant HIV-1 p24, Biotin Labeled
RP-541	Recombinant HIV-1 p24, Horseradish Peroxidase Labeled
RP-542	Recombinant HIV-1 gag p17-p24, gp41-gp120
RP-543	Recombinant HIV-1 gag p17, p24, gp120
RP-546	Recombinant HIV-1 gp120 MN
RP-548	Recombinant HIV-1 gp120 CM
RP-550	Recombinant HIV-1 gp41, Biotin Labeled
RP-551	Recombinant HIV-1 gp41, Horseradish Peroxidase Labeled
RP-552	Recombinant HIV-1 gp41 Long, Biotin Labeled
RP-553	Recombinant HIV-1 gp41 Long, Horseradish peroxidase Labeled
RP-554	Recombinant HIV-1 gag p17, p24
RP-555	Recombinant HIV-1 pol Integrase
RP-556	Recombinant HIV-1 p24 gag
RP-557	Recombinant HIV-1 nef
RP-558	Recombinant HIV-1 gp160 LAV
RP-559	Recombinant HIV-1 gp160 MN
RP-560	Recombinant HIV-1 p66 pol
RP-561	Recombinant HIV-1 TAT, Biotin Labeled
RP-562	Recombinant HIV-1 TAT
RP-563	Recombinant HIV-1 p55 gag
RP-564	Recombinant HIV-1 Envelope conjugated to HIV-2 gp39
RP-565	Recombinant HIV Type-O Envelope
RP-567	Recombinant HIV Type-O gp41
RP-568	Recombinant HIV-2 gp32
RP-569	Recombinant HIV-2 gp32, Biotin Labeled
RP-570	Recombinant HIV-2 gp32, Horseradish Peroxidase Labeled
RP-571	Recombinant HIV-2 gp36
RP-572	Recombinant HIV-2 gp36 (390-702)
RP-573	Recombinant HIV-2 Envelope
RP-576	Recombinant HIV Type-O gp41, MBP tag
RP-579	Recombinant HIV-1 p31 Integrase
RP-580	Recombinant HIV-1 gp120 LAV
RP-587	Recombinant HIV-1 p24 Core, Sf9

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