

□ Cat # RP-536

Recombinant HIV-1 p24

Size: □ 10 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.

#### Description:

HIV-1 p24 recombinant- is a 51 kDa non-glycosylated polypeptide chain, containing the HIV-1 p24 immunodominant regions. It was expressed in *Escherichia Coli* (>95.0%). It is supplied in 1.5 M urea, 25mM Tris-HCl pH-8.0 and 50% Glycerol. Protein is shipped at ambient temperature. Upon arrival, Store at -20°C Stable for Five years frozen. One month in solution at room temperature. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

#### Specificity:

Immunoreactive with all sera of HIV-1 infected individuals.

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

**Usage:** This item is for LABORATORY RESEARCH USE ONLY.

RP-536 140414A

#### Related Items

Catalog#	ProdDescription
AB-15110	Mouse Anti-HIV-1 gp120 (PND) IgG
AB-15210	Mouse Anti- HIV-1 p24 IgG
AB-15910	Mouse Anti-HIV-1 gp41 IgG
AB-16010	Anti-HIV-1 gp41 IgG
AB-21010	Anti-HIV-1 gp120 IgG
AD-122-B	HIV-1 RT (4.3), DNA Aptamer, Biotinylated
AD-122-F	HIV-1 RT (4.3), DNA Aptamer, FITC labeled
AD-122-U	HIV-1 RT (4.3), DNA Aptamer, unlabeled
AD-123-B	HIV-1 TAR RNA Hairpin Loop (B22-19), DNA Aptamer,
AD-123-U	HIV-1 TAR RNA Hairpin Loop (B22-19), DNA Aptamer,
AR-240-U	HIV-1 Integrase (P5), RNA Aptamer, unlabeled
HGP411-R	Recombinant (E. coli) HIV-1 gp41, protein (soluble)
HGP412-R	Recombinant (E. coli) HIV-1 gp41 protein
HP1201-R	Recombinant (E. coli) HIV-1 p120 protein
HP241-R	Recombinant (E. coli) HIV-1 p24 protein (soluble)
MA-20141	Mouse Monoclonal Anti-Human HIV-1 Tat interacting protein
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-544	Recombinant HIV-1 gp41 (HIV gp41 288 aa, 466-753-beta gal
RP-545	Recombinant HIV-1 gp41 Long (513-674 a.a.)
RP-546	Recombinant HIV-1 gp120 MN
RP-548	Recombinant HIV-1 gp120 CM
RP-549	Recombinant HIV-1 TAT Clade-C
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-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-579	Recombinant HIV-1 p31 Integrase
RP-580	Recombinant HIV-1 gp120 LAV
RP-581	Recombinant HIV-1 gp41, His tag
RP-582	Recombinant HIV-1 gp41, MBP tag
RP-583	Recombinant HIV-1 p24 gag, His Tag
RP-586	Recombinant HIV-1 Envelope, His Tag
RP-587	Recombinant HIV-1 p24 Core, S9
SP-101042-1	gp120, HIV-1 MN
SP-101043-5	HIV-1, HIV-2 Protease Substrate
SP-53757-5	HIV-1 tat Protein (47-57)
SP-56522-5	HIV-1 gag Protein p24 (65-73) (isolates MAL/U455)
SP-56769-1	HIV-1 env Protein gp120 (278-292)
SP-58843-1	HIV-1 env Protein gp41 (1-23) amide
SP-59144-1	HIV-1 rev Protein (34-50)
SP-71312-5	HIV-1 tat Protein (49-57)
SP-89131-1	HIV-1 gag Protein p24 (137-154)
SP-89132-1	HIV-1 gag Protein p24 (194-210) (
SP-89145-5	HIV-1 tat Protein (1-9)