Recombinant HIV1 Gag-Pol Protein, His&Trx tagged

Cat. No. gag-pol-001H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant HIV1 p24 Protein (133-363) with a TRX and His tag was expressed in E. coli.
Species	HIV
Source	E.coli
ProteinLength	133-363aa
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. 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 genomeis converted to double-stranded DNA by 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

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	genome can be transcribed. HIV1 performs highly complex orchestrated tasks during the assembly, budding, maturation and infection stages of the viral replication cycle. During viral assembly, the proteins form membrane associations and self-associations that ultimately result in budding of an immature virion from the infected cell. Gag precursors also function during viral assembly to selectively bind and package two plus strands of genomic RNA. Capsid protein p24 probably forms the conical core of the virus that encapsulates the genomic RNA-nucleocapsid complex.
Tag	His&Trx
Endotoxin	Not tested.
Storage	For long term storage, it is recommended to store at -20 or -80 centigrade in appropriate aliquots. Avoid repeated freeze-thaw cycles.
Storage Buffer	1×PBS, pH 7.4.

GENE INFORMATION

Gene Name	gag-pol Gag-Pol [Human immunodeficiency virus 1]
Official Symbol	gag-pol
Synonyms	gag-pol; Gag-Pol; Gag-Pol; Gag-Pol polyprotein; aspartic peptidase; p66 subunit; integrase; Gag-Pol Transframe peptide; Pol; reverse transcriptase p51 subunit; Pr160
Gene ID	155348
Protein Refseq	NP_057849.4
UniProt ID	P04585

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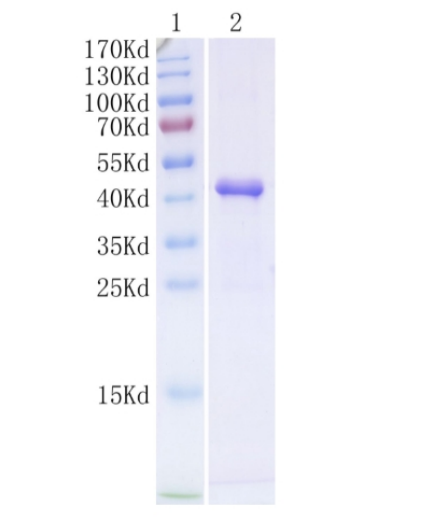
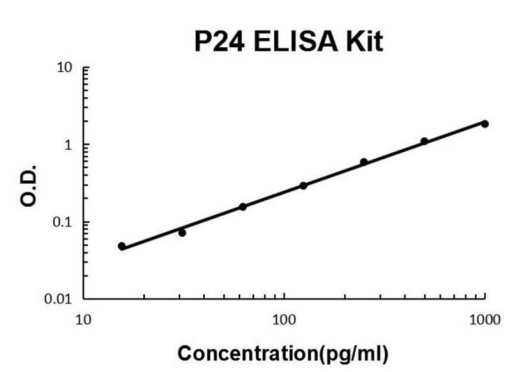
Recombinant p24 Protein on SDS-PAGE under reduced condition.



The purity is greater than 90%.

ELISA analysis with anti-HIV-1 p24 antibody.



The antigen was used as the coating antigen, and the anti-HIV-1 p24 antibody was used as the capture antigen for ELISA.

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