Product Data Sheet

Proteins



p24 Protein, HIV-1 (AAB50258, His)

Cat. No.: HY-P73924

Synonyms: CA; Capsid Protein; HIV1 Gag p24; Gag polyprotein; Pr55(Gag)

Species: Source: E. coli

AAB50258 (P133-L363) Accession:

Gene ID: 155030

Molecular Weight: Approximately 27 kDa

PROPERTIES

AA Saguanca

AA Jequelice				
·	PIVQNIQGQM	VHQAISPRTL	NAWVKVVEEK	AFSPEVIPMF
	SALSEGATPQ	DLNTMLNTVG	GHQAAMQMLK	ETINEEAAEW
	DRVHPVHAGP	IAPGQMREPR	GSDIAGTTST	LQEQIGWMTN
	NPPIPVGEIY	KRWIILGLNK	IVRMYSPTSI	LDIRQGPKEP
	FRDYVDRFYK	TLRAEQASQE	VKNWMTETLL	VQNANPDCKT

LEEMMTACQG ILKALGPAAT VGGPGHKARV

Appearance Lyophilized powder

Formulation Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.

Endotoxin Level <1 EU/ μ g, determined by LAL method.

Reconsititution It is not recommended to reconstitute to a concentration less than $100 \, \mu g/mL$ in ddH_2O . For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is

recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

The Gag-Pol polyprotein assumes a central role in the virion assembly process, collaborating with the Gag polyprotein to orchestrate essential events such as binding to the plasma membrane, facilitating protein-protein interactions crucial for spherical particle formation, recruiting viral Env proteins, and packaging genomic RNA through direct interactions with the RNA packaging sequence (Psi). This polyprotein potentially regulates its own translation by binding genomic RNA in the 5'-UTR, exhibiting a dual role in promoting translation at low concentrations and encapsidating genomic RNA to inhibit translation at higher concentrations. The multipartite membrane-binding signal, including the myristoylated N-terminus,

targets the polyprotein to the plasma membrane. Additionally, the Matrix protein within the polyprotein is implicated in the pre-integration complex and is associated with the release from the host cell mediated by Vpu. The ability of Gag-Pol to bind to RNA further underscores its multifaceted functions in the intricate process of virion assembly^{[1][2][3][4]}.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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