

### HIV-1 p24 Antibody [8G9]

Catalog # ASC12019

### **Specification**

### HIV-1 p24 Antibody [8G9] - Product Information

Application WB
Primary Accession P04591

Other Accession AAB50258, 327745

Reactivity

Host

Clonality

Isotype

Virus

Mouse

Monoclonal

IgG1

Calculated MW Predicted: 24, 41, 55 kDa KDa

Application Notes PM-6335 can be used for detection of p24

by Western blot or ELISA at 0.2 - 0.5

μg/mL.

## HIV-1 p24 Antibody [8G9] - Additional Information

Gene ID **155030** 

### **Target/Specificity**

GAG; By Western blot, anti-HIV-1 p24 antibody detects a  $\sim$ 24 kDa, a  $\sim$ 41 kDa, and a  $\sim$ 55 kDa protein, corresponding to HIV-1 p24 and to its precursors p41 and p55, respectively, in HIV-1 samples.

#### **Reconstitution & Storage**

HIV-1 p24 Monoclonal Antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

#### **Precautions**

HIV-1 p24 Antibody [8G9] is for research use only and not for use in diagnostic or therapeutic procedures.

# HIV-1 p24 Antibody [8G9] - Protein Information

#### Name gag

#### **Function**

[Gag polyprotein]: Mediates, with Gag-Pol polyprotein, the essential events in virion assembly, including binding the plasma membrane, making the protein-protein interactions necessary to create spherical particles, recruiting the viral Env proteins, and packaging the genomic RNA via direct interactions with the RNA packaging sequence (Psi).

## **Cellular Location**

[Gag polyprotein]: Host cell membrane; Lipid- anchor. Host endosome, host multivesicular body {ECO:0000250|UniProtKB:P12493}. Note=These locations are probably linked to virus assembly sites. The main location is the cell membrane, but under some circumstances, late endosomal compartments can serve as productive sites for virion assembly.



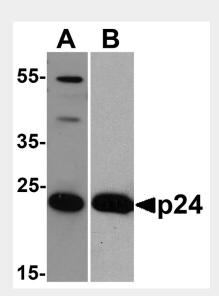
{ECO:0000250|UniProtKB:P12493} [Capsid protein p24]: Virion.

## HIV-1 p24 Antibody [8G9] - Protocols

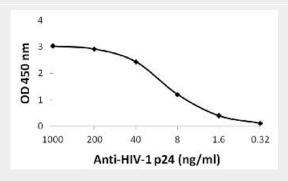
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## HIV-1 p24 Antibody [8G9] - Images



Western blot analysis of 20 ng of (A) viral p24 and (B) recombinant p24 with anti-HIV-1 p24 antibody PM-6335 at (A) 0.5 µg/mL and (B) 0.2 µg/mL, respectively.



Titration ELISA of anti-HIV-1 p24 antibody PM-6335 with 100 ng of recombinant HIV-1 p24 protein.

### HIV-1 p24 Antibody [8G9] - Background

HIV-1 p24 Monoclonal Antibody: The human immunodeficiency virus type 1 (HIV-1) particle consists of an envelope, a core and the region between the two termed matrix (1). The HIV-1 Gag protein is a late structural protein that contains four proteins: matrix (p17), capsid (p24), nucleocapsid (p7)





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and the p6 protein (2). The p24 constitutes the major core component of the virus and shows high degree of sequence conservation among HIV isolates. The Gag p24 has been used as an integral part of multicomponent HIV-1 vaccines (3).

# HIV-1 p24 Antibody [8G9] - References

Goto T, Nakai M, and Ikuta K. The life-cycle of human immunodeficiency virus type 1. Micron 1998; 29:123-38.

Freed EO. HIV-1 gag proteins: diverse functions in the virus life cycle. Virology 1998; 251:1-15. Flynn BJ, Kastenmuller K, Wille-Reece U, et al. Immunization with HIV Gag targeted to dendritic cells followed by recombinant New York vaccinia virus induces robust T-cell immunity in nonhuman primates. Proc. Natl. Acad. Sci. USA 2011; 108:7131-6.