OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

AM33314PU-T Monoclonal Antibody to HIV-1 Gag Capsid protein p24 - Purified

Alternate names: HIV-I, HIV1, Human immunodeficiency virus type 1

Quantity: 20 µg

Concentration: 0.2 mg/ml

Background: Human Immunodeficiency Virus (HIV) is a retrovirus that causes acquired immune deficiency syndrome (AIDS), a condition in humans in which the immune system begins to fail, leading to life-threatening opportunistic infections. HIV mainly infects vital cells in the human immune system such as helper T cells (specifically CD4+ T cells), macrophages and dendritic cells. Two species of HIV infect humans: HIV-1 and HIV-2, with HIV-1 being the more virulent strain. The gag gene of human immunodeficiency virus 1 (HIV-1) encodes a precursor protein known as Pr55Gag. The viral protease PR cleaves this precursor to generate p17, p24, p7, and p6 proteins, which are required for virus particle assembly. HIV-1 Gag p24 is a capsid protein that constitutes the core of AIDS virus HIV-1. p6 and p7 are the components of the nucleocapsid, and p17 provides a protective matrix. HIV-1 Gag p24 is indispensable to the reproduction of AIDS virus and constitutes an essential element for the AIDS virus particle construction. As this protein is detectable from the early stage of AIDS virus infection, its measurement is commonly used as an indicator of HIV-1 infection and viral load.

Uniprot ID: P04585

NCBI: NP_057849.4

GeneID: 155348

Host / Isotype: Mouse / IgG1

Recommended Isotype Controls: AM03095PU-N

Clone: HIV1-24/661

Immunogen: Recombinant HIV-1 Gag p24 protein.

Format:
State: Liquid purified IgG fraction from Bioreactor Concentrate
Purification: Protein A/G Chromatography
Buffer System: 10mM PBS
Preservatives: 0.05% Sodium Azide
Stabilizers: 0.05% BSA

Applications:
ELISA: Use BSA free Antibody for Coating.
Immunofluorescence: 0.5-1 µg/ml.
Immunocytochemistry on Acetone or Paraformaldehyde Fixed Sections: 0.5-1.0 µg/ml for 30 minutes at RT.
Positive Control: HIV-1 infected cells or tissues.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Molecular Weight: 24kDa (mature); 55kDa & 41kDa (precursors)

Specificity: Recognizes Human Immunodeficiency Virus Type-1 p24(HIV1-p24).
Cellular Localization: Membrane.

Storage: Store undiluted at 2-8°C.
Shelf life: one year from despatch.

General Readings:

1. Voltersvik P, Bostad L, Dyrhol-Riise AM, Eide GE, Røsok BI, Olofsson J, et al. Cystatin A and HIV-1 p24 antigen expression in tonsillar lymphoid follicles during HIV-1 infection and during highly active antiretroviral therapy. J Acquir Immune Defic Syndr. 2006 Mar;41(3):277-84. PubMed PMID: 16540928.