

HIV-Igp41 antibody (mAb)

Mouse Anti-HIV-I gp41

Instruction Manual

Catalog Number	PK-AB913-159
Quantity	500 µg
Description	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.
Source / Host	Mouse
Immunogen	Recombinant gp41
Purification Method	Ion exchange chromatography
Clone / IgG Subtype	clone NYRHIV1gp41; Mouse IgG1
Specificity	HIV-I gp41
Formulation	Lyophilized
Reconstitution	Please Note: Always centrifuge product briefly before opening vial. Reconstitute with 0.5 ml sterile H2O or PBS to give a 1 mg/ml concentration. Mix gently, wash the sides of the vial and wait 30-60 seconds before use. Protein concentration: 1 mg/ml (after reconstitution).
Storage & Stability	Lyophilized: store at 4°C in a dry environment. After reconstitution, if not used within a month, aliquot and store at -20°C. Avoid repeated freeze / thaw cycles. Two years lyophilized, one month in solution at 4°C.
Applications	By direct ELISA (against recombinant gp41), 1:10,000 dilution will yield an O.D. of 0.27 using alkaline phosphatase conjugated rabbit anti-mouse Ig. Optimal dilution has to be determined by user. Antibody might be well suitable for other applications not tested so far.

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