



10451 ROSELLE STREET, #300, SAN DIEGO, CA 92121
TELEPHONE (858) 642-1988 • FAX (858) 642-1989
WWW.ATSBIO.COM • ATS@ATSBIO.COM

Antibody to HIV-1 p24
MOUSE MONOCLONAL

Catalog Number: AB-484
Quantity: 500 micrograms, 1 milligram
Format: Lyophilized
Host: Mouse
Isotype: IgG1
Clone: YDHIV1gp24
Immunogen: recombinant HIV-1 p24

Background:

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 is 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.

Specificity and Preparation:

The monoclonal antibody to HIV-1 p24 was purified by ion exchange column.

Usage and Storage:

The antibody is titered against recombinant gp24 in ELISA. A 1:10,000 dilution will yield 0.4 O.D. units with an alkaline phosphatase conjugated rabbit anti-mouse secondary antibody.

Material may be shipped at room temperature. Store lyophilized material at 4°C in dry environment.

Reconstitute with H₂O, mix gently and wait 30-60 seconds before use. Once reconstituted, aliquot and store at -20°C. Material is stable for two years lyophilized, one month in solution at 4°C.