



6352 CORTE DEL ABETO, STE B
CARLSBAD, CA 92011 USA
01.858.642.1988 • WWW.ATSBIO.COM

Antibody to HIV-1 gp41
RABBIT POLYCLONAL

Catalog Number: AB-483
Quantity: 1 milliliter, 5 milliliters, 10 milliliters
Format: Serum
Host: Rabbit
Immunogen: recombinant HIV-2 protein expressed in *E. coli*

Background:

Human immunodeficiency virus (HIV) is a retrovirus that can cause 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:

Anti-HIV-1 gp41 is rabbit serum against the *E. coli*-derived recombinant HIV-1 protein. It is immunoreactive with HIV-1 gp41, generates a strong positive control spot on HIVSav 1+2 and generates 1 OD (410 nm) at a dilution of 1:250 on AS 1001 (DEV-1) ELISA.

Usage and Storage:

Reported to be effective for direct ELISA.
Store at -20°C. Material is stable for one year frozen, one month at 4°C. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

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