

From Biology to Discovery™

HIV-1 gp41 Antibody

Subcategory: Rabbit Polyclonal Antibody

Cat. No.: 250695 Unit: 0.1 mg

Description:

The transmembrane protein gp41 (TM) acts as a class I viral fusion protein. Under the current model, the protein has at least 3 conformational states: pre-fusion native state, prehairpin intermediate state, and post-fusion hairpin state. During fusion of viral and target intracellular membranes, the coiled coil regions (heptad repeats) assume a trimer-ofhairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target cell membranes. Complete fusion occurs in host cell endosomes and is dynamin-dependent, however some lipid transfer might occur at the plasma membrane. The virus undergoes clathrindependent internalization long before endosomal fusion, thus minimizing the surface exposure of conserved viral epitopes during fusion and reducing the efficacy of inhibitors targeting these epitopes. Membranes fusion leads to delivery of the nucleocapsid into the cytoplasm. The gp120-gp41 heterodimer seems to contribute to T-cell depletion during HIV-1 infection.

Isotype: Rabbit Ig

Applications: E, WB, IHC **Species Reactivity:** Vs

Format: Each vial contains 0.1 mg lgG in 0.1 ml (1 mg/ml) of PBS pH7.4 with 0.09% sodium azide. Antibody was purified

by Protein-G affinity chromatography.

Alternate Names: Envelope glycoprotein gp160; Env polyprotein; Transmembrane protein; TM; Glycoprotein 41; gp41; Human immunodeficiency virus type 1; HIV-1

Accession No.: P04578

Antigen: KLH-conjugated synthetic peptide encompassing a

sequence within the C-term of HIV-1 gp41.

Application Notes: E: 1:500-1:1,000; WB: 1:100-1:500; IHC:

1:100-1:500

Storage: Store at -20°C. Minimize freeze-thaw cycles. Product is guaranteed one year from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.