

HIV-1 gp120 (vA-20): sc-17458

BACKGROUND

The attachment of enveloped viruses to cells and the fusion of viral and cellular membranes are critical early events in the HIV viral infection. This process is mediated by envelope glycoproteins (gp) on the surface of the virus. The human immunodeficiency virus type 1 (HIV-1) envelope glycoprotein, gp160, is proteolytically cleaved into gp120 and gp41, which remain non-covalently associated with one another. gp120 is one of the proteins that forms the envelope of HIV. gp120 projects from the surface of HIV and binds to the CD4 molecule on helper T cells. gp120 has been a logical experimental HIV vaccine because the outer envelope is the first part of the virus that encounters antibody. gp41 is embedded in the outer envelope of HIV that anchors gp120. gp41 also plays a key role in HIV's infection of CD4⁺ T cells by facilitating the fusion of the viral and cell membranes. The nomenclature of the gp proteins describes their respective molecular masses (e.g., gp160, gp120, gp41).

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SOURCE

HIV-1 gp120 (vA-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HIV-1 gp120.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-17458 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HIV-1 gp120 (vA-20) is recommended for detection of gp120 envelope glycoprotein of HIV-1 origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of HIV-1 gp120: 120 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **HIV-1 gp120 (A00019.01): sc-81010**, our highly recommended monoclonal alternative to HIV-1 gp120 (vA-20).