

Mouse Anti-gp120/gp140(HIV-1)(Clade A/B/C) Monoclonal Antibody

CATALOG NUMBER: MIV-ABC-113

Applications

Envelope glycoprotein gp120/gp140 is a heavily glycosylated protein exposed on the surface of the HIV envelope. It is essential for viral entry because it mediates attachment to host cells through interactions with attachment factors such as DC-SIGN and heparan sulfate proteoglycans (HSPGs), as well as the primary receptor CD4. Binding to CD4 triggers conformational changes in gp120 and gp41 that ultimately lead to fusion of the viral and host cell membranes.

Gp120 is encoded by the HIV env gene, which produces the precursor protein gp160 (~850 amino acids). Gp160 is cleaved by the cellular protease furin into gp120 (~480 amino acids) and gp41 (~345 amino acids). Three gp120-gp41 heterodimers assemble into a trimeric envelope spike on the virion surface, which mediates viral attachment and entry into host cells. Gp140 is a recombinant form of Env that contains gp120 and part or all of the gp41 ectodomain and is widely used in HIV research and vaccine development.

Applications

Western blot, ELISA, IP, IF, etc.

Description

Mouse anti-gp120/gp140 (HIV-1/Clade A/B/C) monoclonal antibody, Clone# D113

Isotype

IgG1

Epitope

Linear

Immunogen

Recombinant gp120 (Con_A2/2006) (HIV-1) protein (aa 34-518)

Specificity

Reacts with most HIV-1 gp120/gp140 proteins as tested

Size

100 µg

Concentration

1 mg/mL purified IgG in PBS with 40% glycerol

Storage

Store at -70°C for long-term storage. Stable at 4 °C for 3-month from the date of shipment. Non-hazardous.

