

Ebola Virus Glycoprotein (EBOV GP) Antibody

Catalogue No.: abx201321

Ebola Virus Glycoprotein (EBOV GP) Antibody (Subtype Zaire, Strain Mayinga 1976) is a Mouse Monoclonal antibody for the detection of Ebola Virus Glycoprotein (EBOV GP).

The fourth gene of the EBOV genome encodes a 16-kDa envelope-attached glycoprotein (GP) and a 11 kDa secreted glycoprotein (sGP). Both GP and sGP have an identical 295-residue N-terminus, however, they have different C-terminal sequences. Recently, great attention has been paid to GP for vaccines design and entry inhibitors isolation. GP is a class I fusion protein which assembles as trimers on viral surface and plays an important role in virus entry and attachment. Mature GP is a disulfide-linked heterodimer formed by two subunits, GP1 and GP2, which are generated from the proteolytical process of GP precursor (pre-GP) by cellular furin during virus assembly. The GP1 subunit contains a mucin domain and a receptor-binding domain (RBD); the GP2 subunit has a fusion peptide, a helical heptad-repeat (HR) region, a transmembrane (TM) domain, and a 4-residue cytoplasmic tail. The RBD of GP1 mediates the interaction of EBOV with cellular receptor (e.g. DC-SIGN/LSIGN, TIM-1, hMGL, NPC1, β -integrins, folate receptor- α , and Tyro3 family receptors), of which TIM1 and NPC1 are essential for EBOV entry; the mucin domain having N- and O-linked glycans enhances the viral attachment to cellular hMGL, and participates in shielding key neutralization epitopes, which helps the virus evades immune elimination. There are large conformation changes of GP2 during membrane fusion, which enhance the insertion of fusion loop into cellular membrane and facilitate the release of viral nucleocapsid core to cytoplasm.

Target:	Ebola Virus Glycoprotein (EBOV GP)
Clonality:	Monoclonal
Clone:	U777
Reactivity:	Virus
Tested Applications:	ELISA
Host:	Mouse
Recommended dilutions:	ELISA: 1/1000 - 1/2000. Optimal dilutions/concentrations should be determined by the end user.
Conjugation:	Unconjugated
Immunogen:	Recombinant EBOV (subtype Zaire, strain Mayinga 1976) Glycoprotein / GP Protein
Isotype:	IgG ₁
Form:	Liquid
Purification:	Purified by Protein A affinity chromatography. 0.2 μ m filtered.
Storage:	Aliquot and store at -20 °C. Avoid repeated freeze/thaw cycles.

Datasheet

Version: 3.0.0

Revision date: 30 May 2025



Buffer: PBS.

Concentration: 1 mg/ml

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

Directions for use: Centrifuge before opening to ensure complete recovery of vial contents.

For Reference Only