Datasheet for ABIN7383906

anti-ZEBOV GP antibody

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Overview

Quantity:	50 µL
Target:	ZEBOV GP
Reactivity:	Zaire ebolavirus
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ZEBOV GP antibody is un-conjugated
Application:	ELISA

Product Details

Immunogen:	Recombinant EBOV (subtype Zaire, strain H.sapiens-wt/GIN/2014/Kissidougou-C15) Glycoprotein / GP Protein (His Tag), ABIN7198910
Isotype:	IgG
Specificity:	Anti-Ebola virus EBOV(subtype Zaire, strain H.sapiens-wt/GIN/2014/Kissidougou-C15) Glycoprotein/GP Polyclonal Antibody
Purification:	Antigen Affinity

Target Details

Target:	ZEBOV GP
Alternative Name:	ZEBOV Glycoprotein/GP (ZEBOV GP Products)
Background:	Glycoprotein,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

Target Details

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.

Application Details

Application Notes:	ELISA 1:5000-1:10000
Restrictions:	For Research Use only

Handling

Concentration:	1 mg/mL
Buffer:	0.2 μm filtered solution in PBS
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.