

10-10022: Monoclonal Antibody to Ebola GP I (Clone: ABM47F9)

Clonality :	Monoclonal
Clone Name :	ABM47F9
Application :	WB
Gene :	GP
Gene ID :	3160774
Uniprot ID :	Q7T9D9
Format :	Purified
Alternative Name :	GP
Isotype :	Mouse IgG2b Kappa
Immunogen Information :	A partial Length recombinant GP I protein of Sudan Ebola virus was used as an immunogen for this antibody.

Description

The Sudan ebola virus (SUDV) glycoprotein (GP) is an envelope glycoprotein that is present on the virion surface and is involved in receptor binding and mediating viral entry. It is composed of a trimer of heterodimers (GP1/GP2), where GP1 and GP2 remain covalently linked by a disulfide bond⁹, and the resulting GP1-GP2 pair trimerizes to form a ~450 kDa envelope spike on the viral surface. GP is synthesized as a single polypeptide of 676 amino acids in length that is post-translationally cleaved by furin to yield two subunits, GP1 and GP2. The GP1 subunit contains two heavily glycosylated domains, the glycan cap and the mucin-like domain (MLD). The glycan cap contains only N-linked glycans, whereas the MLD contains both N- and O-linked glycans. All 15 N-glycosylation sites of GP1 could be removed without compromising the expression of GP. In the endosome, a flexible loop containing GP1 residues 190-213 is cleaved by host cathepsins. This cleavage releases the glycan cap and mucin-like domains from GP1. The GP1 subunit is responsible for receptor binding and attachment to new host cells.

Product Info

Amount :	25 µg / 100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Western blot analysis: 0.5-1 µg/ml

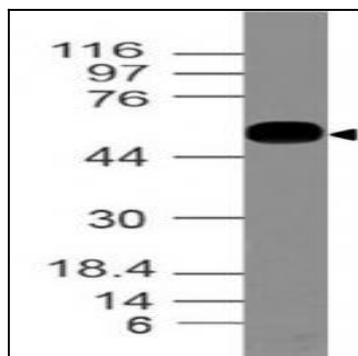


Fig-1: Western blot analysis of Ebola GP I. Anti-Ebola GP I antibody (Clone: ABM47F9) was tested at 0.1 $\mu\text{g/ml}$ partial length recombinant protein.