

## 10-10021: Monoclonal Antibody to Ebola GP II (Clone: ABM4C78)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	ABM4C78
<b>Application :</b>	WB
<b>Gene :</b>	GP
<b>Gene ID :</b>	3160774
<b>Uniprot ID :</b>	Q7T9D9
<b>Format :</b>	Purified
<b>Alternative Name :</b>	GP
<b>Isotype :</b>	Mouse IgG2a Lambda
<b>Immunogen Information :</b>	A partial Length recombinant GP II protein (N terminus 155aa) 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 bond<sup>9</sup>, 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 GP2 subunit mediates virus-cell membrane fusion and viral entry. Structural analysis of the core domain of Ebola virus GP2 indicates that the fusion-active conformation of GP2 is similar to that of the other class I membrane fusion proteins, suggesting a common membrane fusion mechanism. In the endosome, GP2 releases from GP1 and undergoes irreversible conformational changes that drive fusion with host endosomal membranes. GP2 contains an N-terminal peptide, a hairpin-forming fusion loop, and two heptad repeats connected by a functionally important linker. The first heptad repeat of GP2 is wound around the base of GP1 in a metastable, prefusion-specific conformation.

### Product Info

<b>Amount :</b>	25 µg / 100 µg
<b>Purification :</b>	Protein G Chromatography
<b>Content :</b>	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.
<b>Storage condition :</b>	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

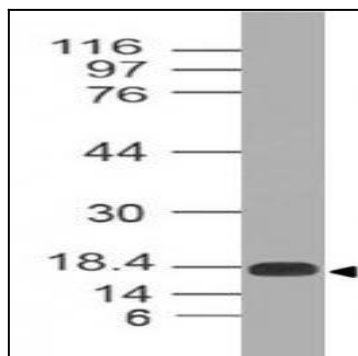


Fig-1: Western blot analysis of Ebola GP II. Anti-Ebola GP II antibody (Clone: ABM4C78) was tested at 0.1  $\mu$ g/ml partial length recombinant protein.