Viral EBOV GP Antibody

Recombinant Monoclonal Mouse IgG_{2A} Clone # 993408

Catalog Number: MAB9016

DESCRIPTION

Species Reactivity	Viral
Specificity	Detects EBOV GP in direct ELISAs.
Source	Recombinant Monoclonal Mouse IgG_{2A} Clone # 993408
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant Viral EBOV GP Ile33-Arg501 Accession # Q05320
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

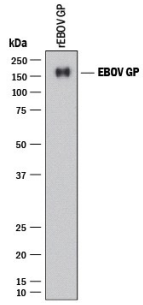
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below

DATA

Western Blot



Detection of EBOV GP by Western Blot. Western blot shows Recombinant EBOV GP. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Viral EBOV GP Monoclonal Antibody (Catalog # MAB9016) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for EBOV GP at approximately 150 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The GP glycoprotein encoded by the genome of Ebola family viruses is a critical molecule for the pathogenicity of *Ebolavirus* hemorrhagic viruses (1, 2). It is processed into distinct forms for virus capsule or cell surface presentation or release from virus infected cells. The GP precursor protein is cleaved by furin at a multibasic site to yield a 140 kDa N-terminal fragment (GP1) and a 26 kDa C-terminal fragment (GP2) which remain disulfide linked (3). GP1 is entirely extracellular while GP2 is a transmembrane protein (4). Heterodimers of GP1-GP2 can further associate into trimers (5). GP expressed on virus infected cells can be shed by TACE mediated cleavage, liberating a disulfide linked complex of soluble GP1 and truncated GP2 (4-6). GP binds to multiple C-type lectins on target cell surfaces, including CLEC10A/MGL, DC-SIGN, and DC-SIGNR (7-9). Following internalization, GP1 is cleaved by Cathepsin B and Cathepsin L and then interacts with Niemann-Pick C1 (NPC1) in the endosomal membrane (10-12).

References:

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