

DESCRIPTION

Species Reactivity	Viral
Specificity	Detects EBOV GP in direct ELISAs.
Source	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
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.