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See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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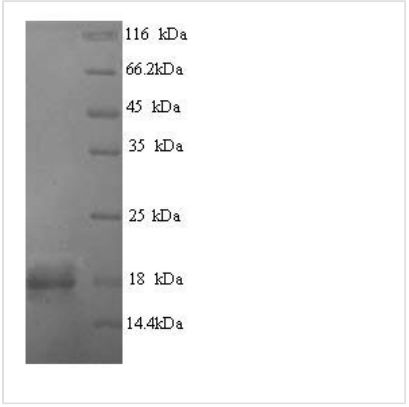
Recombinant Zaire ebolavirus Envelope glycoprotein(GP),partial

Product Code	CSB-YP310843ZAA
Relevance	GP1 is responsible for binding to the receptor(s) on target cells. Interacts with CD209/DC-SIGN and CLEC4M/DC-SIGNR which act as cofactors for virus entry into the host cell. Binding to CD209 and CLEC4M, which are respectively found on dendritic cells (DCs), and on endothelial cells of liver sinusoids and lymph node sinuses, facilitate infection of macrophages and endothelial cells. These interactions not only facilitate virus cell entry, but also allow capture of viral particles by DCs and subsequent transmission to susceptible cells without DCs infection (trans infection). Binding to the macrophage specific lectin CLEC10A also ses to enhance virus infectivity. Interaction with FOLR1/folate receptor alpha may be a cofactor for virus entry in some cell types, although results are contradictory. Mbers of the Tyro3 receptor tyrosine kinase family also se to be cell entry factors in filovirus infection. Once attached, the virions are internalized through clathrin-dependent endocytosis and/or macropinocytosis. After internalization of the virus into the endosomes of the host cell, proteolysis of GP1 by two cysteine proteases, CTSB/cathepsin B and CTSL/cathepsin L presumably induces a conformational change of GP2, unmasking its fusion peptide and initiating mbranes fusion .GP2 acts as a class I viral fusion protein. Under the current model, the protein has at least 3 conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell mbrane fusion, the coiled coil regions (heptad repeats) assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target cell mbranes. Responsible for penetration of the virus into the cell cytoplasm by mediating the fusion of the mbrane of the endocytosed virus particle with the endosomal mbrane. Low pH in endosomes induces an irreversible conformational change in GP2, releasing the fusion hydrophobic peptide .GP1,2 mediates endothelial cell activation and decreases endothelial barrier function. Mediates activation of primary macrophages. At terminal stages of the viral infection, when its expression is high, GP1,2 down-modulates the expression of various host cell surface molecules that are essential for immune surveillance and cell adhesion. Down-modulates integrins ITGA1, ITGA2, ITGA3, ITGA4, ITGA5, ITGA6, ITGAV and ITGB1. GP1,2 alters the cellular recycling of the dimer alpha-V/beta-3 via a dynamin-dependent pathway. Decrease in the host cell surface expression of various adhesion molecules may lead to cell detachment, contributing to the disruption of blood vessel integrity and horrhages developed during Ebola virus infection (cytotoxicity). This cytotoxicity appears late in the infection, only after the massive release of viral particles by infected cells. Down-modulation of host MHC-I, leading to altered recognition by immune cells, may explain the immune suppression and inflammatory dysfunction linked to Ebola infection. Also down-modulates EGFR surface expression .GP2delta is part of the complex GP1,2delta released by host ADAM17 metalloprotease. This secreted complex may play a role in the

	pathogenesis of the virus by efficiently blocking the neutralizing antibodies that would otherwise neutralize the virus surface glycoproteins GP1,2. Might therefore contribute to the lack of inflammatory reaction seen during infection in spite the of extensive necrosis and massive virus production. GP1,2delta does not se to be involved in activation of primary macrophages .
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P87671
Alias	GP1,2 ;GP
Product Type	Recombinant Protein
Immunogen Species	Zaire ebolavirus (strain Eckron-76) (ZEBOV) (Zaire Ebola virus)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	EAIVNAQPKCNPNLHYWTTQDEGAAIGLAWIPYFGPAAEGIYTEGLMHNQNGLICGLRQLANETTQALQLFLRATTELRTFSILNRKAIDFLLQRWGGTCHILGPDCCIEPHDWTKNITDKIDQIIHDFVDKTLPD
Lead Time	Delivery time may differ from different purchasing way or location, please kindly consult your local distributors for specific delivery time.
Research Area	Others
Source	Yeast
Gene Names	GP
Protein Names	Recommended name: Envelope glycoprotein Alternative name(s): GP1,2 Short name= GP Cleaved into the following 3 chains: 1. GP1 2. GP2 3. GP2-delta
Expression Region	502-637aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	17.3kDa
Protein Description	Partial
Image	 (Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.