

Datasheet for ABIN2181010

Glycoprotein / GP (Virus) (AA 33-304) protein (His tag)[Go to Product page](#)[1 Image](#)[1 Publication](#)

Overview

Quantity:	100 µg
Target:	Glycoprotein / GP (Virus)
Protein Characteristics:	AA 33-304
Origin:	Ebola Virus
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	His tag

Product Details

Sequence:	AA 33-304
Characteristics:	This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 31.8 kDa. The protein migrates as 40-60 kDa under reducing (R) condition (SDS-PAGE).
Purity:	>90 % as determined by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	Glycoprotein / GP (Virus)
Target Type:	Viral Protein
Background:	EBOV encodes seven structural proteins: nucleoprotein (NP), polymerase cofactor (VP35),

Target Details

(VP40), GP, transcription activator (VP30), VP24, and RNA polymerase (L). GP protein contains 160- kDa envelope-attached glycoprotein (GP) and a 110 kDa secreted glycoprotein (sGP). GP is a class I fusion protein which assembles as trimers on viral surface and plays an important role in virus entry and attachment. Mature GP is a disulfide-linked heterodimer formed by two subunits, GP1 and GP2, which are generated from the proteolytical process of GP precursor (pre-GP) by cellular furin during virus assembly . 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. GP2 acts as a class I viral fusion protein. GP1,2 mediates endothelial cell activation and decreases endothelial barrier function. sGP seems to possess an anti-inflammatory activity as it can reverse the barrier-decreasing effects of TNF alpha.

Molecular Weight:	31.8 kDa
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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Buffer:	PBS, pH 7.4
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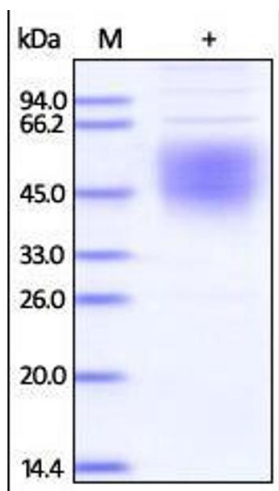
Handling Advice:	Please avoid repeated freeze-thaw cycles.
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Storage:	-20 °C
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Storage Comment:	No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C), After reconstitution under sterile conditions for 3 months (-70 °C).
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Publications

Product cited in:	Smiley Evans, Tutaryebwa, Gilardi, Barry, Marzi, Eberhardt, Ssebide, Cranfield, Mugisha, Mugisha, Kellermann, Mazet, Johnson: "Suspected Exposure to Filoviruses Among People Contacting Wildlife in Southwestern Uganda." in: The Journal of infectious diseases , Vol. 218, Issue suppl_5, pp. S277-S286, (2018) (PubMed).
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SDS-PAGE

Image 1. Ebolavirus (subtype Bundibugyo, strain Uganda 2007) GP1 on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.