

Product datasheet

Recombinant AMARV GP protein (His tag) ab190126

3 Images

Description

Product name Recombinant AMARV GP protein (His tag)

Purity > 70 % SDS-PAGE.

Expression system Baculovirus infected Sf9 cells

Accession [A1L25245.1](#)

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Marburg virus

Sequence

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MKTTCLLISLIIQGVKTLPILEIASNIQPQNVDVSCSGTLQKT
EDVHLM GFTLSGQKVADSPLEASKRW
AFRAGVPPKNVEYTEGEEAKTCYNISVT
DPSGKSLLLDPPNTNIRDYPKCKTIHHIQGQNPHAQGIALLH
W GAFFLY
DRIASTTMYRGKVFTEGNIAAMVNKTVHKMIFSRQGGQYR
HMNLTSTNK YWTSSNGTQTNDTG
CFGTLQEYNSTKNQTCAPSKKPLPLPTAHPEVKL
TSTSDATKLNNTDPNSDDEDLTSSGSGSGEQEPYT
TSDAATKQGLSS
TMPPTPSPQPSTPQQGGNNTNHSQGVVTEPGKTNNTAQP
SMPPHNTTIS TNNTSKHN
LSTPSVPIQNATNYNTQSTAPENEQTSAPSKTTLPTENP
TTAKSTNSTKSPTTTPNNTNKYSTSPSPT
PDSTAQHLVYFRRKRNIL
WREGDMFPFLDGLINAPIDFDPVPNTKTIFDESSSSGASA
EEDQHASPNI SL
TLSYFPKVNENTAHS GENENDCDAELRMSVQEDDLAAG
LSWIPFF GPGIEGLYTAGLIKNQNNLVCRLR
RLANQTAKSLELLLRVTTEERTFS
LINRHAI DFLARWGGTCKVLGPDCCIGIEDLSRNISEQIDQI
KKD EQ
KEGTGWGLGGKWWTSDWGVLTNLGILLLSIAVLIALSCIC
RIFTKYIG
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Predicted molecular weight 60 kDa including tags

Tags	His tag C-Terminus
Additional sequence information	Angola marburgvirus glycoprotein minus the transmembrane domain (MARV-Angola rGPdTM). The theoretical molecular weight of the protein is ~60 kDa including the His-tag, without glycosylation.

Specifications

Our **Abpromise guarantee** covers the use of **ab190126** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Western blot SDS-PAGE ELISA
Form	Liquid

Preparation and Storage

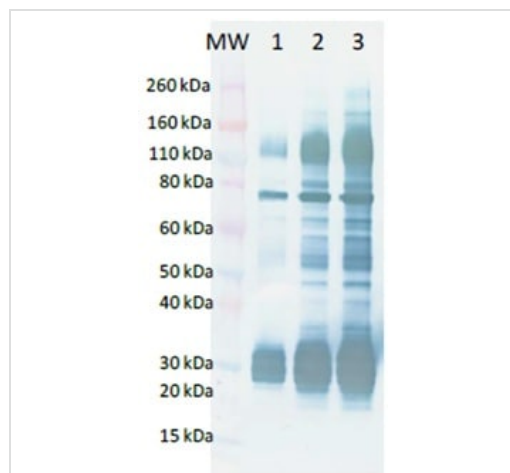
Stability and Storage	Shipped at 4°C. Store at -80°C. Avoid freeze / thaw cycle. Constituent: PBS PBS is supplemented with 10% glycerol, arginine and glutamic acid.
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General Info

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). 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 membrane 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 membranes. Responsible for penetration of the virus into the cell cytoplasm by mediating the fusion of the membrane of the endocytosed virus particle with the endosomal membrane. Low pH in endosomes induces an irreversible conformational change in GP2, releasing the fusion hydrophobic peptide
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Cellular localization	GP2: Virion membrane; Single-pass type I membrane protein. Virion membrane; Lipid-anchor. Host cell membrane; Single-pass type I membrane protein . Host cell membrane; Lipid-anchor By similarity. Note: In the cell, localizes to the plasma membrane lipid rafts, which probably represent the assembly and budding site. GP1: Virion membrane; Peripheral membrane protein. Host cell membrane; Peripheral membrane protein. Note: GP1 is not anchored to the viral envelope, but associates with the extravirion surface through its binding to GP2. In the cell, both GP1 and GP2 localize to the plasma membrane lipid rafts, which probably represent the assembly and budding site.
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Images



Western blot - Recombinant AMARV GP protein (His tag) (ab190126)

All lanes : rabbit polyclonal antibody anti AMARV GP at 0.5 µg/ml

Lane 1 : Recombinant AMARV GP protein (His tag) (ab190126) at 0.1 µg

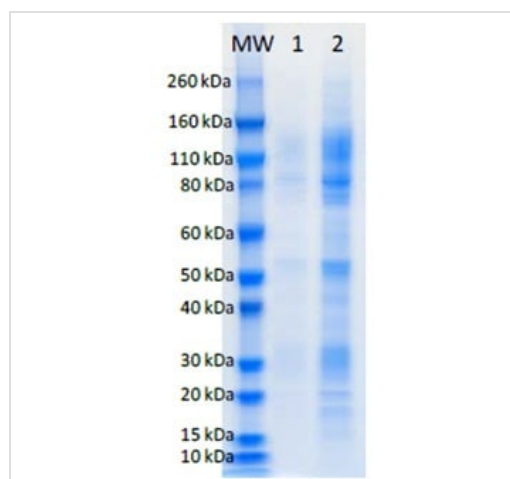
Lane 2 : Recombinant AMARV GP protein (His tag) (ab190126) at 0.5 µg

Lane 3 : Recombinant AMARV GP protein (His tag) (ab190126) at 1 µg

Secondary

All lanes : anti-rabbit IgG-HRP conjugate, followed by substrate.

Predicted band size: 74 kDa



SDS-PAGE - Recombinant AMARV GP protein (His tag) (ab190126)

SDS-PAGE analysis of 1 µg and 5 µg (lanes 1, 2 respectively) of ab190126 under denaturing and reducing conditions.

MARV-Angola rGPdTM ng/well	OD 650 nm
800.00	3.636
400.00	3.553
200.00	3.581
100.00	3.546
50.00	3.436
25.00	3.194
12.50	2.812
6.25	2.184

ELISA - Recombinant AMARV GP protein (His tag) (ab190126)

Plate was coated with ab190126 starting at 800 ng/well, serially diluted in DPBS. Washed plate was detected using one dilution of a positive control serum, followed with anti-IgG HRP conjugate and TM substrate. OD650 is reported. Background of ab190126 coated plate without positive control serum was 0.051 OD650.

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