

Human CellExp™ Recombinant Ebolavirus BDBV Envelope Glycoprotein 1 (GP1)
GP1, GP, Envelope glycoprotein, GP2 (subtype Bundibugyo, strain Uganda 2007)
Catalog # PBV11541r

Specification

Human CellExp™ Recombinant Ebolavirus BDBV Envelope Glycoprotein 1 (GP1) - Product info

Primary Accession [B8XCN0](#)
Calculated MW **31.8 kDa KDa**

Human CellExp™ Recombinant Ebolavirus BDBV Envelope Glycoprotein 1 (GP1) - Additional Info

Other Names

GP1, GP, Envelope glycoprotein, GP2

Gene Source	Bundibugyo virus
Source	HEK 293 cells
Assay&Purity	SDS-PAGE;> 95%
Recombinant	Yes
Target/Specificity	
GP	

Application Notes

Reconstitute in 1X PBS to the desired protein concentration.

Format

Lyophilized

Storage

-20°C; Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally Trehalose is added as protectant before lyophilization.

Human CellExp™ Recombinant Ebolavirus BDBV Envelope Glycoprotein 1 (GP1) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Human CellExp™ Recombinant Ebolavirus BDBV Envelope Glycoprotein 1 (GP1) - Images

Human CellExp™ Recombinant Ebolavirus BDBV Envelope Glycoprotein 1 (GP1) -

Background

EBOV encodes seven structural proteins: nucleoprotein (NP), polymerase cofactor (VP30), (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.