

**Human CellExp™ Recombinant EBOV Envelope Glycoprotein 1**  
**GP1, GP, Envelope glycoprotein, GP2**  
**Catalog # PBV11540r****Specification**

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**Human CellExp™ Recombinant EBOV Envelope Glycoprotein 1 - Product info**

Primary Accession [P87666](#)  
Calculated MW **51.6 kDa** KDa

**Human CellExp™ Recombinant EBOV Envelope Glycoprotein 1 - Additional Info****Other Names**

GP1, GP, Envelope glycoprotein, GP2

Gene Source	<b>Zaire ebolavirus</b>
Source	<b>HEK 293 cells</b>
Assay&Purity	<b>SDS-PAGE;&gt; 95%</b>
Recombinant	<b>Yes</b>
<b>Target/Specificity</b>	
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 EBOV Envelope Glycoprotein 1 - 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 EBOV Envelope Glycoprotein 1 - Images****Human CellExp™ Recombinant EBOV Envelope Glycoprotein 1 - Background**

EBOV encodes seven structural proteins: nucleoprotein (NP), polymerase cofactor (VP35), (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.