BioVision 08/16 For research use only

## Human CellExp™ Recombinant Ebolavirus BDBV Small/secreted Glycoprotein (sGP)

**CATALOG NO:** P1059-10 10 μg P1059-25 25 μq

ALTERNATE NAMES: Ebola sGP, Ebolavirus BDBV (subtype Bundibugyo,strain Uganda

2007)

SOURCE: HEK 293 cells (lle 33 - Arg 324)

PURITY: > 95% by SDS – PAGE

MOL. WEIGHT: Ebolavirus BDBV (subtype Bundibugyo,strain Uganda 2007) sGPis

fused with a polyhistidine tag at the C-terminus, and has a calculated MW of 34.3 kDa. The predicted N-terminus is Ile 33. DTT-reduced Protein migrates as 40-55 kDa in SDS-PAGE.

**ENDOTOXIN LEVEL:** < 1.0 EU per 1μg of protein (determined by LAL method)

FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4.

Generally Mannitol or Trehalose is added as a protectant before

lyophilization.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and

use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can

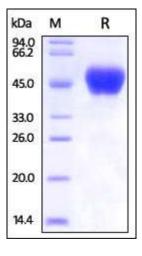
be stored at 2-8°C for up to 1 month. For extended storage, it is

recommended to store at -20°C.

**DESCRIPTION:** 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. GP 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.



## Recombinant Ebolavirus BDBV:

The purity of Ebolavirus BDBV (subtype Bundibugyo,strain Uganda 2007) sGP was determined by DTT-reduced (+) SDS-PAGE and staining overnight with Coomassie Blue.

## **RELATED PRODUCT:**

- Human CellExp™ Recombinant EBOV Envelope Glycoprotein 1 (Cat. No. 1060-10, -50)
- Active HIV-2 Protease Recombinant (GST-tagged) (Cat. No. 7851-20, -100)
- Active HIV1 Protease Recombinant (GST-tagged) (Cat. No. 7849-20, -100)
- Human CellExp™ HIV-1 (CN54) GP120 (Cat. No. P1003-20, -100)
- Human CellExp™ HAVCR1 / KIM1 / TIM1, Human recombinant (Cat. No. 7232-10)
- Human CellExp™ HVEM/TNFRSF14, Human recombinant (Cat. No. 7466-20, -100)
- Human CellExp™ Influenza A virus / Neuraminidase (NA) (Cat. No. 7508-20)
- Human CellExp™ KIM3/HAVCR2, Human recombinant (Cat. No. 7495-10, -50)
- Human CellExp™ TPO, Human Recombinant (Cat. No. 6483-10, -50)

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