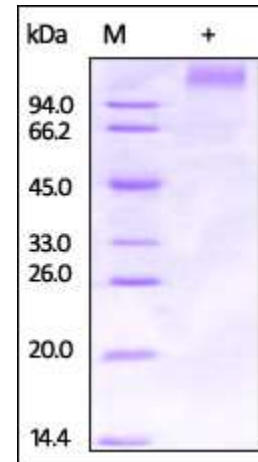


Human CellExp™ Recombinant EBOV Envelope Glycoprotein 1

CATALOG NO:	P1060-10 P1060-50	10 µg 50 µg
ALTERNATE NAMES:	GP1, GP, Envelope glycoprotein, GP2	
SOURCE:	HEK 293 cells (Ile 33 - Arg 501)	
PURITY:	> 95% by SDS-PAGE	
MOL. WEIGHT:	Ebolavirus EBOV (subtype Zaire, strain Kikwit-95) GP1 is fused with a polyhistidine tag at the C-terminus, and has a calculated MW of 51.6 kDa. The predicted N-terminus is Ile 33. DTT-reduced Protein migrates as 120-140 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 EBOV:

The purity of Ebolavirus EBOV (subtype Zaire, strain Kikwit-95) GP1 was determined by DTT-reduced (+) SDS-PAGE and staining overnight with Coomassie Blue.

RELATED PRODUCT:

- Human CellExp™ Recombinant Ebolavirus BDBV Small/secreted Glycoprotein (sGP) **(Cat. No. 1059-10, -25)**
- 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)**

FOR RESEARCH USE ONLY! Not to be used on humans.