Recombinant Ebola Virus Envelope Glycoprotein (GP1), His-tagged

Cat. No. EBO-195 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	This Ebola virus envelope glycoprotein (GP1) is derived from the GP1 sequence (Accession # ACI28624), expressing Ile33-Gln304.This Ebola virus envelope glycoprotein (GP1) is fused with a polyhistidine tag at the C-terminus, and has a calculated MW of 31.8 kDa. The protein is expressed in HEK293 cells. DTT-reduced Protein migrates as 40-60 kDa in SDS-PAGE.
Tag	His
Background	Ebola virus envelope glycoprotein is initially produced as a precursor known as pre-GP, which is cleaved by furin into two subunits, GP1 and GP2, which remain associated through a disulfide linkage between Cys53 of GP1 and Cys609 of GP2. This heterodimer assembles into a 450- kDa trimer at the surface of nascent virions. The virion-attached GP is critical in the EBOV life cycle, as it is solely responsible for attachment, fusion and entry of target cells. Moreover, GP is responsible for critical pathogenic differences among viral species.The role of Ebola virus envelope glycoprotein in EBOV pathogenesis is unclear, but is examined in detail by Lee and Saphire (2009). Ebola hemorrhagic fever (EHF) is a severe disease caused by several species of Ebolavirus (EBOV), in the family Filoviridae. Prior to 2007, four species of EBOV had been identified, with two (Zaire ebolavirus andSudan ebolavirus) having caused significant disease outbreaks in humans. Outbreaks of EHF are associated with person-to-person transmission after the virus is introduced into humans from a zoonotic reservoir. During outbreaks the virus is commonly transmitted through direct

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	contact with infected persons or their bodily fluids. The onset of EHF is associated with nonspecific signs and symptoms, including fever, myalgias, headache, abdominal pain, nausea, vomiting, and diarrhoea. In the later stages of disease, overt hemorrhage has been reported in up to 50% of cases. The presence of a fifth EBOV virus species, Bundibugyo ebolavirus (BEBOV) was identified after an outbreak of EHF in the Bundibugyo District of western Uganda in 2007.
Purity	>90% by SDS-PAGE
Formulation	DPBS pH7.4
Stability	Stability before reconstitution: At ambient temperature: 1 month At +4 centigrade: 12 months At <-20 centigrade: 24 months Stability after reconstitution: At -80 centigrade: 3 months
Freezing	Can be frozen, but avoid multiple freeze/thaw cycles.
Storage	Store lyophilised product at 4 centigrade for short term, or frozen at -20 centigrade - -80 centigrade for long term. Product is shipped at ambient temperature
Concentration	Dependent upon reconstitution volume.
Notes	This product is intended for research and manufacturing uses only. It is not a diagnostic device. The user assumes all responsibility for care, custody and control of the material, including its disposal, in accordance with all regulations.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Type	Recombinant
ClassID 1	Infectious Disease

GENE INFORMATION

Synonyms	Ebola Virus Envelope Glycoprotein (GP1) (Bundibugyo)

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA