

Recombinant His Tag Ebola virus Glycoprotein GP1 Protein

Cat No:HR4S0035

For research use only

Overview

Quantity	
Gene Symbol	
Gene ID	
Accession	ACI28624.1
Alternative Name	
Species	
Source	Baculovirus-Insect Cells
Description	This recombinant protein is a class I viral fusion protein that mediates viral attachment, host cell entry and membrane fusion and serves as the sole surface-exposed viral antigen critical for infectivity. GP is synthesized as a precursor and cleaved by host proteases, including furin, to generate the disulfide-linked subunits GP1 and GP2; GP1 constitutes the extracellular, receptor-binding component of the trimeric spike and contains the receptor-binding domain as well as a heavily glycosylated mucin-like region implicated in immune evasion, while GP2 anchors the complex in the viral membrane and mediates membrane fusion during endosomal entry. The GP gene also produces a secreted glycoprotein (sGP) via RNA editing, which shares the N-terminal sequence with GP1 but diverges at the C-terminus and is proposed to function as an immune decoy. Due to its essential role in viral entry and surface accessibility, GP1 is widely utilized in vaccine design, neutralizing antibody development and antiviral research.
Functions	
Formulation	
Solubility	
Appearance	Lyophilized powder
Molecular Weight	53.5 kDa
Purity	>95% (SDS-PAGE)
Concentration	
Shipping Condition	
Storage Condition	Store at -20°C/-80°C upon receipt, aliquoting is necessary for mutiple use. Avoid repeated freeze-thaw cycles.