



Rabbit Anti-Zaire Ebolavirus GP protein polyclonal antibody (CABT-L2769)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Rabbit polyclonal antibody to Zaire Ebolavirus GP protein
Specificity	This antibody react with Zaire Ebolavirus GP protein
Target	Zaire Ebolavirus GP protein
Immunogen	Envelope glycoprotein processed to GP1 and GP2. Transmembrane and cytoplasmatic domains are removed. Immunogen contains C-terminal linker and hexahistidine tag sequence (GSGHHHHHH). Expressed by 293-based cell line.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	EBOV
Purification	Immunogen affinity purification
Conjugate	Unconjugated
Applications	ELISA, WB, IF
Format	Liquid
Concentration	Lot specific
Size	100 µg
Buffer	Concentrated ammonium sulphate in PBS, pH 7.4
Preservative	See individual product datasheet

Storage	Store at -20 or -70°C upon receipt. Divide antibody into aliquots prior usage. Avoid multiple freeze-thaw cycles.
Ship	This product is shipped in non-frozen liquid form in ambient conditions

BACKGROUND

Introduction	<p>GP1 is responsible for binding to the receptors on target cells. Interacts with CD209/DC-SIGN and CLEC4M/DC-SIGNR which act as cofactors for virus entry into the host cell. Binding to CD209 and CLEC4M, which are respectively found on dendritic cells (DCs), and on endothelial cells of liver sinusoids and lymph node sinuses, facilitate infection of macrophages and endothelial cells. These interactions not only facilitate virus cell entry, but also allow capture of viral particles by DCs and subsequent transmission to susceptible cells without DCs infection (trans infection). GP2 acts as a class I viral fusion protein. Under the current model, the protein has at least 3 conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell membrane fusion, the coiled coil regions (heptad repeats) assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target cell membranes. GP1,2 mediates endothelial cell activation and decreases endothelial barrier function. Mediates activation of primary macrophages. At terminal stages of the viral infection, when its expression is high, GP1,2 down-modulates the expression of various host cell surface molecules that are essential for immune surveillance and cell adhesion. Down-modulates integrins ITGA1, ITGA2, ITGA3, ITGA4, ITGA5, ITGA6, ITGAV and ITGB1. GP1,2 alters the cellular recycling of the dimer alpha-V/beta-3 via a dynamin-dependent pathway. Decrease in the host cell surface expression of various adhesion molecules may lead to cell detachment, contributing to the disruption of blood vessel integrity and hemorrhages developed during Ebola virus infection (cytotoxicity).</p>
---------------------	--

Keywords	Ebola virus;EBOV;Ebolavirus;Zaire ebolavirus
-----------------	--

GENE INFORMATION

Official Symbol	Ebola Virus
Synonyms	Ebola virus; EBOV; Ebolavirus; Zaire ebolavirus
UniProt ID	A0A068J419