

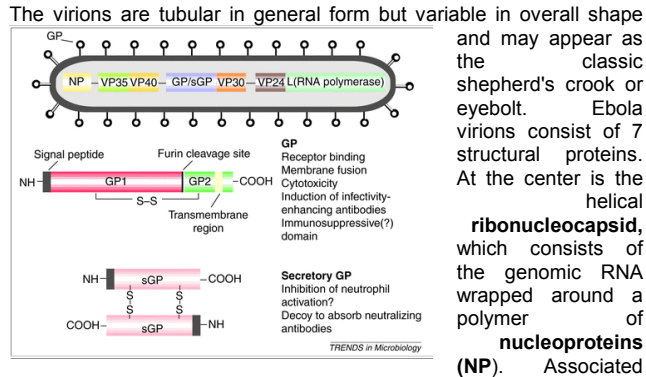
Product Specification Sheet

Recombinant (HEK) Zaire Ebola virus glycoprotein (GIN/2014/Kissidougou-C15, 1-650aa, his-tag at CT, >95%), low endotoxin

Cat # EVGP21-R-10
Cat # EVGP21-R-100

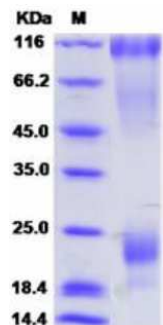
SIZE: 10 ug
SIZE: 100 ug

Ebola virus (EBOV, formerly Zaire ebolavirus) causes severe disease in humans and in nonhuman primates in the form of viral hemorrhagic fever. Zaire ebolavirus is a virological taxon included in the genus Ebolavirus, family Filoviridae, order Mononegavirales. The species has a single virus member, Ebola virus (EBOV). **Ebolavirus species Zaire (ZEBOV)** causes highly lethal hemorrhagic fever, resulting in the death of **90%** of patients within days. Most information on immune responses to ZEBOV comes from *in vitro* studies and animal models. Ebola Zaire attacks every organ and tissue in the human body except skeletal muscle and bone. Ebola is classified as a **Level 4** pathogen (higher than AIDS) with a 2 to 21 day (7 to 14 days average) incubation period. There are currently four known strains of Ebola: **Zaire, Sudan, Reston and Tai**. All cause illness in sub-human primates. Only Ebola Reston does not cause illness in humans. The mortality rate of Ebola victims is between 60% and 90%; with Ebola Sudan at 60% and Ebola Zaire at 90%.



with the ribonucleoprotein is the RNA-dependent **RNA polymerase (L)** with the **polymerase cofactor (VP35)** and a **transcription activator (VP30)**. The ribonucleoprotein is embedded in a matrix, formed by the major (VP40) and minor (VP24) matrix proteins. They are surrounded by a **lipid membrane** derived from the host cell membrane. The membrane anchors a glycoprotein (GP1,2) that projects 7 to 10 nm spikes away from its surface. While nearly identical to **Marburg virions** in structure, ebola virions are antigenically distinct. The most common diagnostic methods are RT-PCR in conjunction with antigen-capture ELISA which can be performed in field or mobile hospitals and laboratories. There are currently no FDA-approved vaccines for the prevention of EVD. The most promising ones are DNA vaccines or are based on adenoviruses, vesicular **stomatitis Indiana virus (VSIV)** or **filovirus-like particles (VLPs)** as all of these candidates could protect nonhuman primates from Ebola virus-induced disease. DNA vaccines, adenovirus-based vaccines, and VSIV-based vaccines have entered clinical trials.

Source of Antigen



Recombinant Zaire Ebola virus glycoprotein (strain H.sapiens-wt/GIN/2014/Kissidougou-C15, accession# AHX24649.1) was expressed in HEK cells as a **his-tag** fusion protein (>95%, ~69 kDa, migrates as broad diffuse bands due to glycosylation). Purified protein is supplied in 20mM Tris, 500mM NaCl, 10% glycerol, (pH 8.0). (see lot sp. Conc. on the vial)

It is suitable for ELISA, Western or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly.

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting: load 20-100 ng/well.

ELISA (50-100 ng antigen/well).

Histochemistry & Immunofluorescence: not tested.

Zaire Ebola GP protein is significantly conserved in various serotypes: Bundibugyo (65%), Tai Forest D'Ivoire (64%), Sudan (54%), Reston (57%). Antibodies and recombinant GP proteins from various Ebola and Marburg viruses are available for control studies.

References: Thomas W (2010) Archives of Virology 155 (12): 2083–103. Taylor D (2010) BMC Evolutionary Biology 10: 193. Feldmann H (2005) . A. Virus Taxonomy—Eighth Report of the International Committee on Taxonomy of Viruses. 645–653.

*This product is for In vitro research use only.

http://www.4adi.com/objects/catalog/product/extras/Ebola_Marburg_Vaccines_ELISA_Flr.pdf	
EVGP15-A vaccine) IgG,	Anti-Zaire Ebola virus glycoprotein (GP, 1-676aa/DNA
EVGP16-A vaccine) IgG,	Anti-Zaire Ebola virus glycoprotein (GP 1-652aa/DNA
EVGP16-R-10	Rec. (sf9) Sudan-Ebola virus glycoprotein (minus transmembrane domain, his-tag, 68 kda), purified
EVGP17-R-10	Recombinant (sf9) Zaire-Ebola virus glycoprotein (minus transmembrane domain, his-tag, 68 kda), purified
EVGP20-R-10	Recombinant (sf9) Zaire Ebola virus glycoprotein (GIN/2014/Kissidougou-C15, 1-650aa, his-tag at CT, >95%), low endotoxin
EVGP21-R-10	Recombinant (HEK) Zaire Ebola virus glycoprotein (GIN/2014/Kissidougou-C15, 1-650aa, his-tag at CT, >95%), Low endotoxin
BVRB11-R-10	Recombinant (HEK) Bundibugyo Ebola virus glycoprotein RBD domain (Uganda 2007, 54-201aa, Fc-tag at CT, >95%, low endotoxin)
EVRB14-R-10	Recombinant (HEK) Zaire Ebola virus glycoprotein RBD domain (Mayinga 1976, 1-308 aa, his tag, >95%, low endotoxin)
SVRB13-R-10	Recombinant (HEK) Sudan-Ebola virus RBD domain (Gulu, 1-320aa, Fc-tag at CT, >95%, low endotoxin)
EVRB13-R-10	Recombinant (HEK) Zaire Ebola virus glycoprotein RBD domain (Mayinga 1976, 1-308 aa, Fc tag at CT, >95%, low endotoxin) purified
SVGP24-R-10	Recombinant (HEK) Sudan-Ebola virus glycoprotein (Gulu, 1-637aa, his-tag at CT, >95% low endotoxin)
EVNP13-A vaccine) IgG,	Anti-Zaire-Ebola virus nucleoprotein (EBOV NP, 1-739/DNA
EVP401-A	Anti-Zaire-Ebola virus VP40 peptide (EBOV VP40) IgG,
EVP401-C	Rec. Zaire-Ebola virus VP40 protein control for Western
EVP405-R-10	Rec. (E.coli) Zaire-Ebola virus VP40
AE-320520-1	Human Anti-Ebola virus Nucleoprotein (NP) IgG ELISA Kit,
AE-320530-1	Human Anti-Ebola virus Nucleoprotein (NP) IgM ELISA Kit
AE-320620-1	Human Anti-Zaire-Ebola virus glycoprotein (GP) IgG ELISA
AE-320720-1	Human Anti-Zaire-Ebola virus VP40 IgG ELISA Kit,
AE-320730-1	Human Anti-Zaire-Ebola virus VP40 IgM ELISA Kit,
AE-320800-48	Human Zaire-Ebola Virus antigen ELISA Kit, 48 tests,
AE-320800-96	Human Zaire-Ebola Virus antigen ELISA Kit, 96 tests,

EVGP21-R-10 141014P

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