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Human anti-EBOV GP mAb (KZ52)

Catalog #: 0260-001

Lot #: 2107001

Immunogen: The human antibody KZ52 was derived from a human convalescent patient who survived an Ebola virus (EBOV) infection. KZ52 is directed towards the EBOV glycoprotein (GP).

Description: Protein A purified neutralizing human monoclonal antibody reactive to EBOV GP (Parren *et al*). The antibody detects recombinant EBOV GP without the transmembrane region (EBOV rGPΔTM) expressed in both mammalian and insect cells.

Supplied: 100 µg is supplied in buffer containing Histidine, sodium chloride and sucrose at a concentration of **2.001 mg/mL.** No preservative is added.

Purification: Antibody is purified using immobilized protein A.

Clonality: Human variable, human constant of the IgG_1 isotype.

Relevance: The antibody can be used for detection of EBOV GP.

References: Lee *et al*. Nature, 454:177-182 (2008)
Parren *et al*. J. Virol., 76:6408-6412 (2002)

Recommended Dilutions:
ELISA: Assay-dependent dilution.

Neutralization Assay: Assay-dependent dilution.

WB: Not suitable for Western Blot analysis.

Storage: 2-3 weeks +4°C, -20°C long term

Cross Reactivity: No cross-reactivity was observed to Sudan Virus (SUDV) or Marburg Virus (MARV) GP or virus-like particles (VLPs).

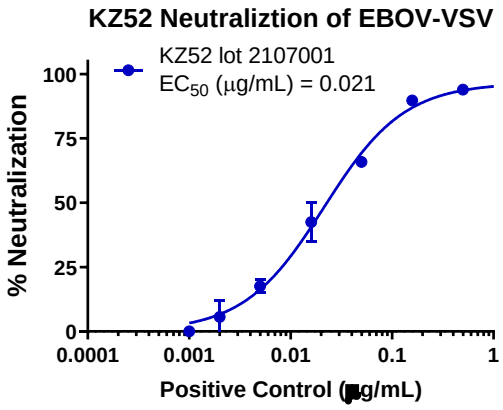
Related Products: *IBT provides a wide array of anti-filovirus specific antibodies and other infectious disease reagents. Please see our website, www.ibtbioservices.com for more details.*

ELISA Data:

KZ52 µg/mL	rGPΔTM 1 µg/mL			VLP @ 10 µg/mL		
	EBOV	SUDV	MARV	EBOV	SUDV	MARV
10.0000	3.092	0.362	0.070	3.034	0.374	0.064
3.1623	3.068	0.152	0.066	2.984	0.152	0.063
1.0000	3.032	0.096	0.072	2.871	0.093	0.061
0.3162	3.055	0.202	0.085	2.764	0.075	0.073
0.1000	2.909	0.287	0.074	2.349	0.079	0.068
0.0316	2.623	0.166	0.080	1.457	0.073	0.072
0.0100	1.838	0.115	0.106	0.601	0.066	0.070
0.0032	0.969	0.082	0.133	0.271	0.070	0.070
0.0010	0.412	0.081	0.118	0.128	0.108	0.078
0.0003	0.184	0.094	0.087	0.093	0.087	0.077
0.0001	0.107	0.081	0.08	0.076	0.096	0.091
	OD 650 nm					

Recombinant GP proteins were diluted to 1 µg/mL and virus-like particles (VLPs) expressing GP proteins were diluted to 10 µg/mL in PBS for plate coating. Anti-EBOV GP antibody (KZ52) was serially diluted semi-log from 10 µg/mL and incubated on the coated plates. Washed plates were detected with anti-human IgG-HRP conjugate and TMB substrate. OD_{650} is reported above.

Neutralization Assay:



Antibody was incubated with vesicular stomatitis viruses (VSV) pseudotyped with Ebola GP and expressing Luciferase (EBOV-VSV) for one hour prior to infectivity on Vero cell monolayers. Infectivity was determined 24 hours post infection by quantification of luciferase signal.