

21 Firstfield RD * Suite 100 Gaithersburg, MD 20878 877-411-2041 Services@ibtbioservices.com

Human anti-EBOV GP mAb (KZ52)

Catalog #: 0260-001

Lot #: 1605006

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 rGP Δ TM) expressed in both mammalian and insect cells.

Supplied: 100 μ g is supplied in buffer containing Histidine, sodium chloride and sucrose at a concentration of **1.732 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. Internal QC demonstrates good detection of recombinant EBOV GP coated to a microtiter plate at $1 \mu g/mL$ when using KZ52 mAb at a concentration between $10 - 0.001 \mu g/mL$.

Neutralization Assay: KZ52 lot 1605006 showed similar neutralization activity compared to KZ52 reference lot 1603003.

WB: Not suitable for Western Blot analysis.

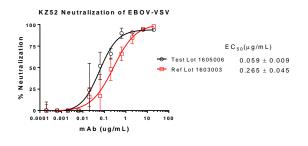
Storage: 2-3 weeks +4°C, -20°C long term

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

ELISA Data:						
KZ52	rGP∆TM 1µ		g/mL VLP @ 10 µg/m		g/mL	
µg/mL	EBOV	SUDV	MARV	EBOV	SUDV	MARV
10.0000	3.502	0.068	0.089	3.498	0.065	0.058
3.1623	3.589	0.076	0.070	3.563	0.058	0.077
1.0000	3.422	0.065	0.077	3.417	0.066	0.062
0.3162	3.292	N/A	N/A	3.233	0.086	0.130
0.1000	2.943	0.070	0.082	2.836	0.067	0.067
0.0316	2.193	0.094	0.081	1.717	0.067	0.074
0.0100	1.119	0.077	0.081	0.808	0.082	0.078
0.0032	0.487	0.092	0.078	0.354	0.086	0.089
0.0010	0.249	0.094	0.075	0.236	0.155	0.143
0.0003	0.134	0.092	0.083	0.190	0.075	0.072
0.0001	0.097	0.075	0.077	0.079	0.085	0.077
	OD 650 nm					

Recombinant GP proteins were diluted to $1 \mu g/mL$ and virus-like particles (VLPs) expressing GP proteins were diluted to $10 \mu g/mL$ in PBS for plate coating. Anti-EBOV GP antibody (KZ52) was serially diluted semi-log from $10 \mu g/mL$ and incubated on the coated plates. Washed plates were detected with anti-human IgG-HRP conjugate and TMB substrate. OD₆₅₀ 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.

Related Products: *IBT* provides a wide array of antifilovirus specific antibodies and other infectious disease reagents. Please see our website, <u>www.ibtbioservices.com</u> for more details.

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