

Human anti-ZEBOV GP mAb (KZ52)

Catalog #: 0260-001

Lot #: 1307001

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

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

Supplied: 100 µg is supplied in PBS at a concentration of 1.31 mg/mL. No preservative is added.

Purification: Antibody is purified using immobilized protein A.

Clonality: Human variable, human constant of the IgG₁ isotype.

Relevance: The antibody can be used for detection of ZEBOV 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 ZEBOV GP coated to a microtiter plate at 1 µg/mL when using KZ52 mAb at a concentration between 20 – 0.02 µg/mL.

Neutralization Assay: Internal QC demonstrated similar neutralization activity for KZ52 lot 1307001 compared to KZ52 reference lot. At 50 µg/mL, KZ52 effectively neutralizes EBOV GP-bearing vesicular stomatitis Indiana virus (VSIV).

WB: Not suitable for Western Blot analysis.

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

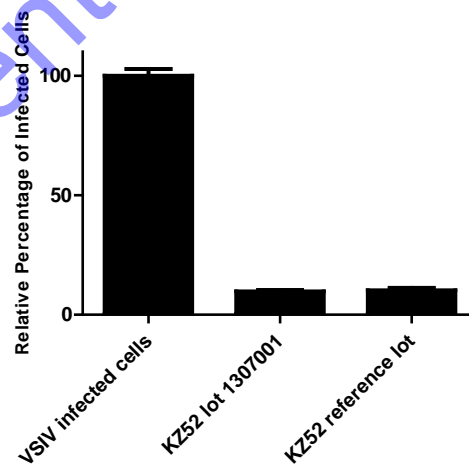
Cross Reactivity: No cross-reactivity was observed to Bundibugyo Ebola Virus (BEBOV) GP, Reston Ebola Virus (REBOV) GP, Sudan Ebola Virus (SEBOV) GP or Marburg Virus (MARV) GP.

ELISA Data:

Anti-ZEBOV GP mAb (KZ52) (µg/mL)	OD 650nm				
	ZEBOV GP @ 1 µg/mL	BEBOV GP @ 1 µg/mL	REBOV GP @ 1 µg/mL	SEBOV GP @ 1 µg/mL	MARV GP @ 1 µg/mL
20.00000	3.305	0.063	0.051	0.060	0.055
6.32456	3.518	0.059	0.055	0.049	0.054
2.00000	3.538	0.050	0.049	0.049	0.052
0.63246	3.491	0.052	0.049	0.054	0.064
0.20000	3.164	0.055	0.049	0.047	0.049
0.06325	2.577	0.052	0.049	0.048	0.049
0.02000	1.523	0.054	0.050	0.048	0.051
0.00632	0.702	0.074	0.049	0.049	0.051
0.00200	0.282	0.053	0.050	0.054	0.055
0.00063	0.137	0.063	0.058	0.049	0.055
0.00000	0.054	0.061	0.053	0.056	0.051

Recombinant GP proteins were diluted to 1 µg/mL in PBS for plate coating. Anti-ZEBOV GP antibody (KZ52) was serially diluted 3-fold from 20 µg/mL and incubated on the coated plates. Washed plates were detected with anti-human HRP conjugate and TMB substrate. OD₆₅₀ is reported above.

Neutralization Assay:



Antibody was incubated with the ebola GP-bearing VSIV at 50 µg/mL for one hour prior to infectivity on Vero cell monolayers. Infectivity was determined 16 hours post infection by enumerating GFP-positive cells.

Related Products:

Rabbit anti-ZEBOV GP epitope specific affinity purified polyclonal antibody. Catalog #0301-015

Mouse anti-ZEBOV GP mAb. Catalog #0201-020