Anti-Envelope protein (soluble) [Z23] Standard Size Ab00941-10.0

Isotype and Format: Human IgG1, Kappa
Clone Number: Z23
Alternative Name(s) of Target: ZIKV sE; Zika virus soluble envelope protein; Zika virus envelope protein; ZIKV soluble envelope protein; ZIKV envelope protein; Zika virus sE protein; ZIKV sE protein; ZIKV sE; Z-23
UniProt Accession Number of Target Protein:
Published Application(s): NTRL, SPR, ELISA, FC
Published Species Reactivity: Zika Virus
Immunogen: Anti-ZIKV mAbs were obtained from the sera and peripheral blood mononuclear cells of a ZIKV-infected patient.
Specificity: Z23 binds to the ZIKV soluble envelope (sE) protein, shown using ELISAs, SPR and kinetic competition assays (Wang et al, 2016). This mAb is highly specific for ZIKV, and was shown to exhibit no neutralisation activity against DENV-1 to DENV-4 virions, which are highly related to ZIKV. Z23 was shown to bind domain III of sE by cryo-electron microscopy. ZIKV has recently become a major global health concern, following a 2015 outbreak. Viral infection is associated with neurological complications and microencephaly.
Application Notes: Z23 was confirmed to bind ZIKV sE protein by ELISA, with an affinity of 0.44 uM shown by SPR (Wang et al, 2016). Using a FACS-based assay, it was shown that Z23 potently neutralised viral activity against infected C6/36 and Vero cells. In vivo, Z23 completely protected IFN receptor KO mice from ZIKV infection.
Antibody First Published in: Wang et al. Molecular determinants of human neutralizing antibodies isolated from a patient infected with Zika virus. Sci Transl Med. 2016 Dec 14;8(369):369ra179. PMID:27974667
Note on publication: Describes the identification of several anti-ZIKV mAbs from the blood of a patient with ZIKV infection. The mAbs identified were characterised for antigen specificity using biochemical and biophysical methods, and a few of the mAbs found were crystallised with the ZIKV sE protein.

Product Form

Size: 200 µg Purified antibody.
Purification:

© 2024 Absolute Antibody
Wilton, UK.

Protein A affinity purified
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -20ºC.
Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.

© 2024 Absolute Antibody
Wilton, UK.