

Anti-ZIKV E domain [A9E] Standard Size Ab02635-15.0

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

This reformatted human antibody was made using the variable domain sequences of the original Human IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgM, Lambda

Clone Number: A9E

Alternative Name(s) of Target: Zika envelope protein ; ZIKV; Zika virus E domain; E domain

UniProt Accession Number of Target Protein:

Published Application(s): neutralizing, WB, ELISA

Published Species Reactivity: Zika Virus

Immunogen: This antibody was generated using 6XL method (Kwakkenbos et al., 2010). Memory B cells were isolated from a subject previously infected with ZIKV. After identification of ZIKV-specific monoclonal cultures, genetic material of the variable domains was isolated and recombinant IgG1 lambda antibody forms were grafted with the sequences.

Specificity: This antibody binds to ZIKV (probably its epitope spans part of EDIII and EDIII/EDI linker) and does not cross-react with DENV4, which was tested as a representative DENV serotype. Its epitope is distinct from the G9E anti-ZIKV antibody.

Application Notes: This antibody has very strong neutralizing properties against Asian and African lineages of ZIKV (Collins et al., 2019). Furthermore, this antibody was effective in preventing Zika infection when administered from one day before the infections in mice (Collins et al., 2019). Therefore, A9E is recommended in development of diagnostic assays which differentiate ZIKV from other flaviviruses (it does not crossreact with DENV) and in the development of therapeutics and vaccines against ZIKV.

Antibody First Published in: Collins et al. Human antibody response to Zika targets type-specific quaternary structure epitopes. JCI Insight. 2019 Apr 18;4(8). pii: 124588. doi: 10.1172/jci.insight.124588. eCollection 2019 Apr 18 [PMID:30996133](#)

Note on publication: This article describes the generation and characterization of the A9E antibody.

Product Form

Size: 50 µg Purified antibody.

Purification:

Affinity Purified using a recombinant lectin column

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

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.