Anti-ZIKV E domain II [SMZAb2] Standard Size Ab01255-15.0

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 IgG format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgM, Lambda

Clone Number: SMZAb2

Alternative Name(s) of Target: ZEDII

UniProt Accession Number of Target Protein: Q91KX7

Published Application(s): neutralisation assays, therapeutic, ELISA

Published Species Reactivity: Zika Virus

Immunogen: Antibody genes were cloned from blood-derived plasmablasts of a ZIKV-infected human subject from Colombia in the acute phase. Amplified heavy and light chains were tested for neutralisation, and SMZAb2 was selected from this.

Specificity: SMZAb2 binds to domain II of the ZIKV E protein. This is distinct to the binding site of SMZAb5 and SMZAb1.

Application Notes: ELISA was used to confirm SMZAb2 binds to the ZIKV E domain, and neutralisation assays identified the IC50 of SMZAb2 as 189 ng/ml. Four macaques were injected with a cocktail of anti-Zika antibodies (SMZAb1, SMZAb2, SMZAb5) and then infected with ZIKV virus. The antibody cocktail appeared to confer sterilising immunity on the treated macaques and completely prevented viral replication, which was not seen with the control group (Magnani et al, 2017).

Antibody First Published in: Magnani et al, 2017. Neutralizing human monoclonal antibodies prevent Zika virus infection in macaques Sci Transl Med. 2017 Oct 4;9(410). pii: eaan8184 PMID:28978754

Note on publication: Describes the isolation of SMZAb2, its characterisation through ELISA and neutralisation assays, and its efficacy in preventing ZIKV viral replication.

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 -

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.