

## Anti-ZIKV E domain III [Z004] Standard Size Ab01253-15.0

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, Kappa

**Clone Number:** Z004

**Alternative Name(s) of Target:** ZEDIII

**UniProt Accession Number of Target Protein:** Q91KX7

**Published Application(s):** crystallography, neutralisation assays, ELISA

**Published Species Reactivity:** DENV1 virus, Zika Virus

**Immunogen:** Human serum was obtained from community participants in Mexico and Brazil and screened for ZIKV neutralisation activity, from which Z004 was identified.

**Specificity:** Z004 is reactive towards ZIKV virus and shows cross-reactivity to DENV1. The epitope of Z004 is the lateral ridge of EDIII.

**Application Notes:** Antibody binding activity to ZEDIII was measured by ELISA, and Z004 was found to have an EC<sub>50</sub> of 23.7 ng/ml (Robbiani et al, 2017). ELISA also showed Z004 has cross-reactivity with the DENV1 virus (Robbiani et al, 2017). Neutralising assays established Z004 has an IC<sub>50</sub> of 0.7 ng/ml for the ZIKV virus, the most potent antibody of those investigated (Robbiani et al, 2017). It also neutralises DENV1. The structure of Z004 in complex with EDIII has been obtained, identifying the Z004 epitope as the EDIII lateral ridge. (Robbiani et al, 2017).

**Antibody First Published in:** Robbiani et al, 2017. Recurrent Potent Human Neutralizing Antibodies to Zika Virus in Brazil and Mexico. Cell. 2017 May 4;169(4):597-609.e11 [PMID:28475892](#)

**Note on publication:** Describes the isolation of Z004 and its characterisation through ELISA, neutralising assays, and x-ray crystallography.

## Product Form

**Size:** 200 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.