

Anti-Flavivirus group antigen [D1-4G2-4-15 (4G2)] Bulk Size Ab00230-48.1-BT

This chimeric ferret antibody was made using the variable domain sequences of the original murine IgG2a format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Ferret IgG1

Clone Number: D1-4G2-4-15 (4G2)

Alternative Name(s) of Target: Protein E; Envelope Protein

UniProt Accession Number of Target Protein:

Published Application(s): IHC-P, NTRL, WB, ELISA, FC, IF

Published Species Reactivity: Dengue Virus, Flaviviridae, West Nile Virus, Yellow Fever Virus, Zika Virus

Immunogen: Dengue Virus type 2 antigens.

Specificity: Recognises flavivirus group specific antigens (Dengue virus, West Nile Virus, Japanese Encephalitis, Yellow Fever Virus, Zika virus etc). It binds to the fusion loop at the extremity of domain II of protein E.

Application Notes: This antibody binds to flavivirus group antigen, protein E. It can be used as an anti-Dengue virus antibody, anti-West Nile virus antibody, anti-Japanese Encephalitis, anti-Yellow Fever Virus or anti-Zika Virus antibody (Aubry et al. 2016) to identify cells infected with these flaviviridae. It binds to the fusion loop at the extremity of domain II of E protein from all four serotypes and prevents syncytia formation (Summers, 1989). The epitope is highly conserved amongst flaviviridae and has been functionally analyzed in detail by Crill and Chang 2004 (PMID: 15564505). Previous studies have used acetone- (Henchal et al. 1982) or methanol-fixed slides (Moreland & Tay, 2010). Please note that binding of this antibody has been reported to be sensitive to reduction and Western Blots should be performed under non-reducing conditions (Lai et al. 2008). A version of 4G2 directly conjugated to APC was used by Quicke and co-workers (Quicke, 2016) to detect Zika virus in human placental macrophages by flow-cytometry (Quicke 2016). Ramaiah et al. (2016) used Ab00230-2.0 at a 1:200 dilution to stain for Zika virus in methanol-fixed Vero cells 48 h post-infection.

Antibody First Published in: Nawa et al. Development of dengue IgM-capture enzyme-linked immunosorbent assay with higher sensitivity using monoclonal detection antibody. J Virol Methods
[PMID:11164919](https://pubmed.ncbi.nlm.nih.gov/11164919/)

Note on publication:

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.