

Flavivirus group antigen Recombinant Antibody

Anti-Flavivirus group antigen [D1-4G2-4-15 (4G2)]

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA14182	Rabbit	Dengue Virus, Zika Virus, West Nile Virus, Flaviviridae, Yellow Fever Virus	Immunofluorescence, Western Blot, Neutralization Assay, ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry

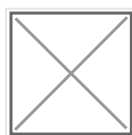
PRODUCT SYNONYMS

Flavivirus group antigen; Anti-Flavivirus group antigen [D1-4G2-4-15 (4G2)]; Protein E; Envelope Protein; Flavivirus group antigen recombinant antibody

PRODUCT SPECIFICATIONS

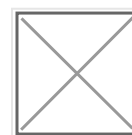
Host	Rabbit
Reactivity	Dengue Virus, Zika Virus, West Nile Virus, Flaviviridae, Yellow Fever Virus
Isotype	Rabbit IgG, kappa
Clone Number	D1-4G2-4-15 (4G2)
Specificity	Recognizes flavivirus group specific antigens (Dengue virus, West Nile Virus, Japanese Encephalitis, Zika virus etc). It binds to the fusion loop at the extremity of domain II of protein E.
Purity/Purification	Protein A Affinity Purified
Form/Format	PBS only with 0.02% Proclin 300.
Concentration	1 mg/ml (varies by lot)
Applicable Applications for Flavivirus group antigen recombinant antibody	IF (Immunofluorescence), WB (Western Blot), NTRL (Neutralization Assay), ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry)
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 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 at a 1:200 dilution to stain for Zika virus in methanol-fixed Vero cells 48 h post-infection.
Immunogen	Dengue Virus type 2 antigens.
Preparation and Storage	Store at 4 degree C for up to 3 months . For longer storage, aliquot and store at -20 degree C.

IMAGES



ELISA

ELISA on Denge Virus-Like Particles using AAA14182 Dengue Virus Serotype 2 VLPs were coated onto a plate at 5µg/ml. Anti-flavivirus antibody (AAA14182) added to plate in a 3-fold serial dilution starting at 1000 ng/ml. Detection performed using HRP labelled goat anti-mouse IgG.



IF (Immunofluorescence)

Detection of Zika virus by immunofluorescence using AAA14182 Immunofluorescence images of Vero cells infected with ZIKV after 30h infection as well as controls. Cells were fixed in 4% PFA for 30 min at RT. Primary antibody (AAA14182, rabbit IgG) staining was performed in 0.3% Triton X-100 at 1:20 dilution overnight at 4°C, detected using a Goat Anti-Rabbit IgG (AF568, 1:500) for 1h at RT and counterstained with DAPI.

ADDITIONAL INFORMATION

Related Product Information for Flavivirus group antigen recombinant antibody	This chimeric rabbit antibody was made using the variable domain sequences of the original murine IgG2a format, for improved compatibility with existing reagents, assays and techniques.
Product Categories/Family for Flavivirus group antigen recombinant antibody	Infectious diseases; Virus
References	Nawa et al. Development of dengue IgM-capture enzyme-linked immunosorbent assay with higher sensitivity using monoclonal detection antibody. J Virol Methods PMID:11164919

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/rabbit-dengue-zika-recombinant-antibody/flavivirus-group-antigen/14182>