Datasheet: MCA2277

BATCH NUMBER 163431

Description:	MOUSE ANTI DENGUE VIRUS
Specificity:	DENGUE VIRUS
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	Dengue 1-11(3)
Isotype:	IgG2a
Quantity:	0.25 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1)**This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.Sodium citrate buffer pH 6.0 is recommended for this purpose.**

Target Species	Viral
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	<0.1% Sodium Azide (NaN_3)
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
RRID	AB_609623
Specificity	**Mouse anti-Dengue virus antibody, clone Dengue 1-11 (3)** recognizes all four dengue virus serotypes (DEN-1, DEN-2, DEN-3 and DEN-4) of the genus *Flavivirus*. Mouse anti-Dengue virus antibody, clone Dengue 1-11 (3) binds strongly to subtypes 1 and 2. It recognizes subtype 3 more weakly. Among the four subtypes, subtype 4 is recognized the least strongly and some customers have reported no recognition of subtype 4. The dengue virus is responsible for the tropical and sub-tropical diseases, dengue (DF) and dengue haemorrhagic fever (DHF), transmitted to individuals through the bite of the *Aedes* mosquito. The global distribution of dengue is expanding and comparable to that of malaria, with symptoms ranging from a mild viral syndrome of high fever, rash, headache, fatigue and muscle and joint pain, to the more severe and sometimes fatal DHF. Each dengue virus serotype is antigenically distinct, such that infection only provides an individual with immunity to the causative serotype, with the possibility of further infection by a different serotype or even multiple serotypes.
Western Blotting	This antibody detects an anti-E/envelope specific band of 61kDa under reducing conditions in Western blotting. A weak secondary band of 80kDa may also be apparent.
References	1. Poggianella, M. *et al.* (2015) Dengue E Protein Domain III-Based DNA Immunisation Induces Strong Antibody Responses to All Four Viral Serotypes. PLoS Negl Trop Dis. 9 (7): e0003947. 2. Slon Campos, J.L. (2017) Evaluation of a Tetravalent DNA Vaccine against Dengue: Integrating Biochemical Studies on Dengue Virus Envelope Protein to a Domain-Based Antigen Design. PhD thesis The Open University. 3. Nguyen, N.L. *et al.* (2015) Expression and characterization of an M cell-specific ligand-fused dengue virus tetravalent epitope using *Saccharomyces cerevisiae*. J Biosci Bioeng. 119 (1): 19-27. 4. Kim,T.G. *et al.* (2010) Cholera toxin B subunit-domain III of dengue virus envelope glycoprotein E fusion protein production in transgenic plants. Protein Expr Purif. 74:236-41. 5. Milic, N.L. *et el.* (2015) Sequence analysis and characterisation of virally induced viperin in the saltwater crocodile (*Crocodylus porosus*). Dev Comp Immunol. 51 (1): 108-15. 6. Kim, M.Y. *et al.* (2018) Plant-expressed Fc-fusion protein tetravalent dengue vaccine with inherent adjuvant properties. Plant Biotechnol J. 16 (7): 1283-94. 7. Kim, B. & Kim, M. (2019) Evaluation of the oral immunogenicity of M cell-targeted tetravalent EDIII antigen for development of plant-based edible vaccine against dengue infection Plant Cell, Tissue and Organ Culture (PCTOC). 137 (1): 1-10.

Further Reading	1. Gubler, D.J. (1998) Dengue and dengue hemorrhagic fever. Clin Microbiol Rev. 11 (3): 480-96. 2. Loroño-pino, M.A. *et al.* (1999) Common occurrence of concurrent infections by multiple dengue virus serotypes. Am J Trop Med Hyg. 61 (5): 725-30. 3. PhilipSamuel, P. & Tyagi, B.K. (2006) Diagnostic methods for detection & isolation of dengue viruses from vector mosquitoes. Indian J Med Res. 123 (5): 615-28.
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2277 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

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