

Mouse Anti-Dengue NS1 [MD429]: MC0668-0.1ML

Intended Use: For Research Use Only

Description: Dengue virus NS1 (nonstructural protein 1) is a versatile 45–50 kDa glycoprotein produced by the dengue virus that plays crucial roles in viral replication, immune evasion, and severe disease pathogenesis. Exists as a monomer aiding in RNA replication within the endoplasmic reticulum. Appears as a dimer anchored to plasma membranes. Secreted (sNS1) is released into the bloodstream as a soluble hexamer or high-density lipoprotein (HDL) co-complex during the acute phase of infection. Circulating NS1 binds to endothelial and immune cells, triggering a cytokine storm and endothelial hyperpermeability that leads to severe plasma leakage and shock. It interacts with and modulates host complement pathways to protect the virus from immune clearance. It is detectable in patient serum from day 1 to day 7 of fever, making NS1 an essential target for early acute-phase diagnostics.

Specifications:

Clone:	MD429
Source:	Mouse
Isotype:	IgG1
Reactivity:	Dengue NS1 protein of all 4 serotypes
Localization:	Dengue NS1
Formulation:	Purified antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, WB
Package:	

Description	Catalog No.	Size
Dengue NS1 [MD429] Concentrated	MC0668-0.1ML	0.1 ml

IHC Procedure*:

Positive Control Tissue:	Dengue Virus infected tissues
Concentrated Dilution:	10-100
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	Overnight at 4°C
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.

References:

1. Protective Role of NS1-Specific Antibodies in the Immune Response to Dengue Virus Through Antibody-Dependent Cellular Cytotoxicity. Luis A Sanchez-Vargas, et al. J Infect Dis. Nov 15;230(5):1147-1156, 2024. doi: 10.1093/infdis/jiae137.
2. Anti-DENV-NS1 monoclonal antibody for the differential histopathological diagnosis of hemorrhagic fever caused by dengue. Cristina Takami Kanamura, et al. Braz J Microbiol. Feb 7;53(2):777–783, 2022. doi: 10.1007/s42770-022-00697-2.
3. A New Approach to Dengue Fatal Cases Diagnosis: NS1 Antigen Capture in Tissues. Monique da Rocha Queiroz, et al. Published: May 3, 2011. doi.org/10.1371/journal.pntd.0001147.