

## DESCRIPTION

<b>Species Reactivity</b>	Viral
<b>Specificity</b>	Detects Dengue Virus 1/2/3/4 NS1 in Western blots. In sandwich immunoassays, Dengue Virus 1/3 NS1 is detected.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 969973
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Human embryonic kidney cell line HEK293-derived recombinant Dengue Virus 3 NS1 protein Asp1-Ala352 Accession # YP_001531169
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	2 µg/mL	See Below
<b>ELISA</b>	This antibody functions as an ELISA capture antibody when paired with Mouse Anti-Dengue Virus 1/3 NS1 Monoclonal Antibody (Catalog # <a href="#">MAB94402</a> ). <i>This product is intended for assay development on various assay platforms requiring antibody pairs.</i>	

## DATA

**Western Blot**

**Detection of Dengue Virus NS1 by Western Blot.** Western blot shows recombinant Dengue Virus (DENV) 1, recombinant DENV2, recombinant DENV3, and recombinant DENV4. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Viral Dengue Virus NS1 Monoclonal Antibody (Catalog # MAB94401) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Dengue Virus NS1 at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

**ELISA**

**Dengue Virus 1/3 NS1 ELISA Standard Curve.** Recombinant Dengue Virus 1 NS1 or Recombinant Dengue Virus 3 NS1 protein was serially diluted 2-fold and captured by Mouse Anti-Dengue Virus NS1 Monoclonal Antibody (Catalog # MAB94401) coated on a Clear Polystyrene Microplate (Catalog # [DY990](#)). Mouse Anti-Dengue Virus 1/3 NS1 Monoclonal Antibody (Catalog # [MAB94402](#)) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # [DY998](#)) followed by Substrate Solution (Catalog # [DY999](#)) and stopping the enzymatic reaction with Stop Solution (Catalog # [DY994](#)).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Dengue virus (DENV), the cause of Dengue fever, is a single positive-stranded RNA virus of the family Flaviviridae, genus Flavivirus. 5 closely related but antigenically distinct serotypes of the virus have been found: DENV-1, DENV-2, DENV-3, DENV-4 and DENV-5. DENV has a genome of about 11,000 bases, encoding a single large polyprotein that is subsequently cleaved into several structural and non-structural peptides. The polyprotein is divided into three structural proteins, C, prM, E, seven non-structural proteins, NS1, NS2a, NS2b, NS3, NS4a, NS4b, NS5, and short non-coding regions on both the 5' and 3' ends. DENV nonstructural protein-1 (NS1) is a secreted glycoprotein that is absent from viral particles but accumulates in the supernatant and on the plasma membrane of cells during infection.