

DESCRIPTION

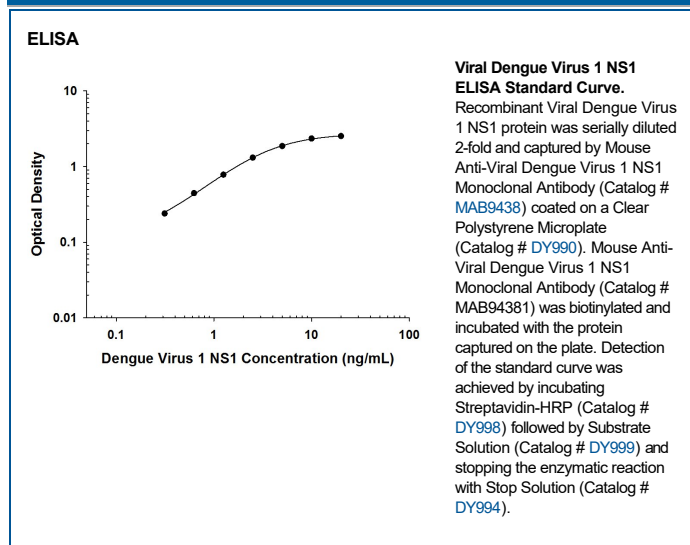
Species Reactivity	Viral
Specificity	Detects viral Dengue Virus 1 NS1 protein in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 973604
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human embryonic kidney cell line HEK293-derived viral Dengue Virus 1 NS1 protein Asp776-Ala1127 Accession # P17763
Formulation	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.

ELISA	This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Viral Dengue Virus 1 NS1 Monoclonal Antibody (Catalog # MAB9438). <i>This product is intended for assay development on various assay platforms requiring antibody pairs.</i>
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DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Dengue virus type 1 non-structural protein 1 (DENV1 NS1) is an approximately 50 kDa viral glycoprotein (1). Dengue viruses are mosquito-borne flaviviruses that exist in nature as four distinct serotypes (DENV1-4) (2). Dengue virus NS1 can be found associated with cell membranes, within cells and at the cell surface, or as secreted extracellular species. The secreted form of NS1 is known to be hexameric (1). Within cells, NS1 plays a significant role in virus replication and has been shown to co-localize with dsRNA and other components of viral replication complexes in viral-induced vesicle packets (1,3). Cell surface-associated and secreted NS1 are profoundly immunogenic, and both the protein itself and the antibodies it elicits have been shown to contribute to either protection or pathogenesis and innate immune evasion (1, 3). Mature DENV1 NS1 contains 352 amino acids (aa) and consists of 2 conserved N-glycosylation sites and 12 invariant cysteine residues that form six intramolecular disulfide bonds (3). Mature DENV1 NS1 shares 73%, 80%, and 69% aa sequence identity with DENV2, DENV3, and DENV4 NS1, respectively.

References:

1. Muller, D. et al. (2012) J. Gen. Virol. **93**:771.
2. VanBlargan, L.A. et al. (2013) PLoS Pathog. **9**:e1003761.
3. Flamand, M. et al. (1999) J. Virol. **73**:6104.