



# DENV type 1 Nonstructural Protein 1 (DAG-T1025)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	<p>The dengue virus (DENV) in one of five serotypes is the cause of dengue fever. It is a mosquito-borne single positive-stranded RNA virus of the family Flaviviridae; genus Flavivirus. All five serotypes can cause the full spectrum of disease.</p> <p>Its genome is about 11000 bases that codes for three structural proteins, capsid protein C, membrane protein M, envelope protein E; seven nonstructural proteins, NS1, NS2a, NS2b, NS3, NS4a, NS4b, NS5; and short non-coding regions on both the 5' and 3' ends. Further classification of each serotype into genotypes often relates to the region where particular strains are commonly found or were first found.</p>
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<b>Species</b>	DENV
<b>Purity</b>	Protein is >95% pure as determined by 12% PAGE (coomassie staining).
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	Each laboratory should determine an optimum working titer for use in its particular application.
<b>Recommended Usage</b>	<p>Creative-Diagnostics's products are furnished for LABORATORY RESEARCH USE ONLY. They may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.</p>
<b>Size</b>	100 µg
<b>Buffer</b>	Phosphate buffered saline pH 7.4.
<b>Preservative</b>	None
<b>Storage</b>	Dengue NS1, ST1 although stable at 4°C for 1 week, should be stored below -18°C. Please prevent freeze thaw cycles.

## BACKGROUND

### Introduction

NS1 is one of 7 Dengue Virus non-structural proteins which are thought to be involved in viral replication. NS1 exists as a monomer in its immature form but is rapidly processed in the endoplasmic reticulum to form a stable dimer. A small amount of NS1 remains associated with intracellular organelles where it is thought to be involved in viral replication. The rest of NS1 is found either associated with the plasma membrane or secreted as a soluble hexadimer. NS1 is essential for viral viability but its precise biological function is unknown. Antibodies raised in response to NS1 in viral infection can cross react with cell surface antigens on epithelial cells and platelets and this has been implicated in the development of Dengue Hemorrhagic fever.

### Keywords

Dengue NS1; Dengue Virus non-structural protein 1; Dengue Virus NS1 glycoprotein

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