

## Recombinant Dengue Type 4 NS1 Protein

Catalog: A2314

Package: 100 µg  
Storage: ≤-20°C

FOR RESEARCH USE ONLY  
NOT FOR USE IN HUMANS



## Product Data Sheet

PD-A2314-Rev. A-10-2011

Name	Accession#	Source	Sequence Region	Molecular Weight	Purification	Application
Type 4 Dengue NS1 Protein	ADA00410	Insect cells	AA776-AA1130	~50 kDa	Affinity	Ag test control

### Background

Dengue virus (DENV) is an arthropod-borne virus belonging to genus *Flavivirus* of the family *Flaviviridae*. The DENV is an enveloped, single-stranded, positive-sense RNA virus with a genome size of about 11 kb long. It encodes three structural proteins (Capsid, prM and Envelope) and seven non-structural proteins (NS1, NS2a, NS2b, NS3, NS4a, NS4b and NS5). NS1 is a highly conserved glycoprotein which is essential for virus viability, although its precise biological function is unknown. During virus infection, NS1 is found associated with intracellular organelles or is alternatively transported through the secretory pathway to the cell surface. In addition, it has also been found in sera from acute phase secondary infections.

DENV consists of four viral serotypes referred to as DENV-1, DENV-2, DENV-3 and DENV-4. All four serotypes can cause the full spectrum of disease ranging from asymptomatic to an acute self-limiting febrile illness known as the Dengue Fever (DF) or with increasing frequency a life-threatening hemorrhagic fever or dengue shock syndrome (DHF/DSS). It is endemic in the tropics and subtropics where an estimated 50-100 million cases occur each year, with a high mortality rate in children.

### Description

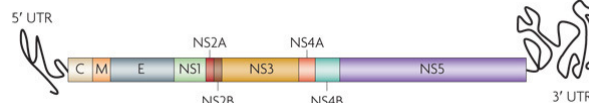
cDNA encodes amino acid 776-1130 of polyprotein from the Dengue Type 4 Virus was cloned into the insect expression vector. The secreted and soluble recombinant protein was purified using immobilized metal-chelate affinity chromatography

**Concentration :** ≥ 1 mg/ml by Bradford dye assay

**Storage Buffer:** 1X PBS, pH7.4

**Preservatives:** 0.1% Thimerosal, 5 mM EDTA, 1µg/ml of Leupeptin, Aprotinin and Pepstatin A

**Purity:** ≥ 95% on 12.5% SDS-PAGE



Dengue virus genome  
*Nature Reviews Microbiology*. 2010 (8) S7-S16.

**Shelf Life:** 12 months at recommended storage conditions

**Storage & Handling:** ≤ -20 °C. Avoid repeated freeze-thawing

**QC Testing:** Tested by SDS-PAGE per WI-71-01-3 & 4

### SDS-PAGE Analysis

