

Product datasheet

Anti-Dengue Virus NS1 glycoprotein antibody [DN3] ab41616

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Overview

Product name	Anti-Dengue Virus NS1 glycoprotein antibody [DN3]
Description	Mouse monoclonal [DN3] to Dengue Virus NS1 glycoprotein
Host species	Mouse
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Dengue virus 1, Dengue virus 2, Dengue virus 3, Dengue virus 4
Immunogen	Full length native protein purified from Dengue Virus 2 (16681) infected supernatant.
Positive control	It is important to ensure that DEN4 infection is effective. DEN4 is notoriously difficult to grow to good titres and NS1 antigens will not be found if infection is not well established.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.1% Proclin 150 Constituents: 10% BSA, 89.9% RPMI 1640
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	DN3
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab41616 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

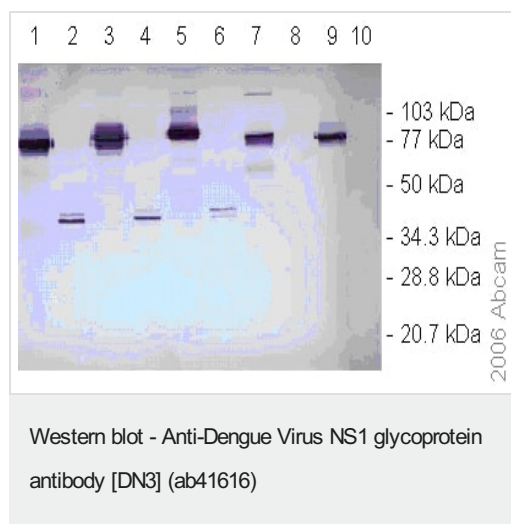
Application	Abreviews	Notes
WB		1/50 - 1/100. Use under non reducing condition. Detects a band of approximately 40, 80 kDa (predicted molecular weight: 40, 80 kDa). Block membrane with PBS containing 5% non-fat skimmed milk (PBS-SM) for 30 minutes. Wash membrane and probe with serum diluted in PBS-SM with 10 mM sodium azide by incubating overnight on a rocker at room temperature.
ICC/IF		1/5 - 1/20.

Target

Relevance

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.

Images



All lanes : Anti-Dengue Virus NS1 glycoprotein antibody [DN3] (ab41616)

Lane 1 : Dengue Virus 1 infected C6/36 cell lysate (unheated)

Lane 2 : Dengue Virus 1 infected C6/36 cell lysate (boiled)

Lane 3 : Dengue Virus 2 (NGC) infected C6/36 cell lysate (unheated)

Lane 4 : Dengue Virus 2 (NGC) infected C6/36 cell lysate (boiled)

Lane 5 : Dengue Virus 2 (16681) infected C6/36 cell lysate (unheated)

Lane 6 : Dengue Virus 2 (16681) infected C6/36 cell lysate (boiled)

Lane 7 : Dengue Virus 3 infected C6/36 cell lysate (unheated)

Lane 8 : Dengue Virus 3 infected C6/36 cell lysate (boiled)

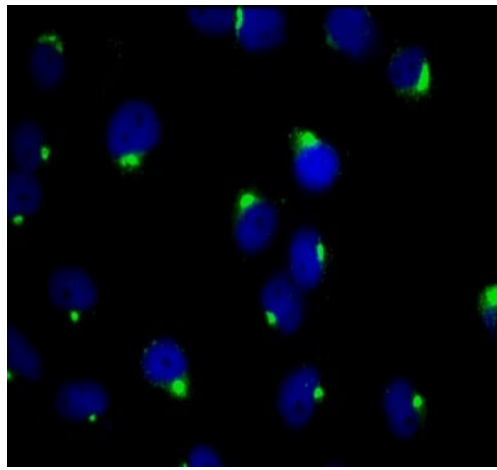
Lane 9 : Dengue Virus 4 infected C6/36 cell lysate (unheated)

Lane 10 : Dengue Virus 4 infected C6/36 cell lysate (boiled)

Predicted band size: 40, 80 kDa

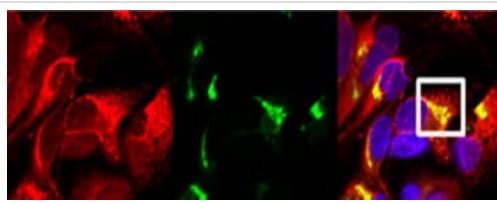
Observed band size: 40,80 kDa

Recognises NS1 dimer (~80 kDa) in unheated samples and NS1 monomer (~40 kDa) when samples are boiled.



Immunocytochemistry/ Immunofluorescence - Anti-Dengue Virus NS1 glycoprotein antibody [DN3] (ab41616)

Dengue Virus 2 infected Vero cells stained according to protocol with [ab41349](#) antibody against Dengue Virus envelope glycoprotein NS1 (green). Cell nuclei are blue.



Immunocytochemistry/ Immunofluorescence - Anti-Dengue Virus NS1 glycoprotein antibody [DN3] (ab41616)

Image from Heaton NS et al, Proc Natl Acad Sci U S A 2010 Oct 5;107(40):17345-50. Epub 2010 Sep 20, Fig 2. DOI 10.1073/pnas.1010811107

ab41616 staining NS1 glycoprotein in Dengue Virus 2 infected Huh-7.5 cells by Immunocytochemistry/ Immunofluorescence. Huh-7.5 cells were plated on glass coverslips, infected with Dengue Virus 2, fixed in methanol, and blocked, and antibody was added in 1× PBS + 0.1% saponin. Antibodies used include FASN polyclonal, left image ([ab3844](#)) or NS1 monoclonal antibody, middle image ([ab41616](#)). Secondary antibodies were species-appropriate Alexa-Fluor 488 or 594 secondary antibody. Stained coverslips were mounted with DAPI, right merged image.

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