**Product datasheet**

**Anti-Dengue Virus NS1 glycoprotein antibody [DN3] ab41616**

2 Abreviews 8 References 3 Images

**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.

**Properties**

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>Preservative: 0.065% Sodium azide</td>
</tr>
<tr>
<td>Purity</td>
<td>Tissue culture supernatant</td>
</tr>
<tr>
<td>Clonality</td>
<td>Monoclonal</td>
</tr>
<tr>
<td>Clone number</td>
<td>DN3</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG1</td>
</tr>
<tr>
<td>Light chain type</td>
<td>kappa</td>
</tr>
</tbody>
</table>

**Applications**

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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
</table>
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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>ICC/IF</td>
<td>1/5 - 1/20.</td>
<td></td>
</tr>
</tbody>
</table>

**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**

Western blot - Anti-Dengue Virus NS1 glycoprotein antibody [DN3] (ab41616)

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

why is the actual band size different from the predicted?

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

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

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.

Please note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors