# Anti-ds DNA antibody [35I9 DNA] ab27156

## Overview

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product name</strong></td>
<td>Anti-ds DNA antibody [35I9 DNA]</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Mouse monoclonal [35I9 DNA] to ds DNA</td>
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<tr>
<td><strong>Host species</strong></td>
<td>Mouse</td>
</tr>
<tr>
<td><strong>Specificity</strong></td>
<td>Primarily Double stranded DNA. Measurements by immuno-CE yielded K_d's of 0.71 µM and 0.09 µM, for the interaction of this antibody with ss- and dsDNA, respectively. Strong reactivity with both ss- and dsDNA has been observed on dotblots as well as very weak reactivity with RNA.</td>
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<tr>
<td><strong>Tested applications</strong></td>
<td>Suitable for: IHC-Fr, Dot blot, ICC, ICC/IF, ELISA</td>
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<tr>
<td><strong>Immunogen</strong></td>
<td>The details of the immunogen for this antibody are not available.</td>
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<td><strong>Positive control</strong></td>
<td>ICC/IF: Stylonychia lemnæe cells; Drosophila melanogaster larval brain cells; MEFs. ELISA: HEK293 cell lysate.</td>
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<tr>
<td><strong>General notes</strong></td>
<td>This antibody has been shown to be useful, using immunofluorescence, in the detection of dsDNA in fx. Crithidia luciliae -a monoflagellate protozoan, containing a giant mitochondrion. The antibody can be used for easy quantification of in vitro cell proliferation by ELISA and has successfully been used for monitoring cytotoxicity and apoptosis as well as ELISA-based co-culture angiogenesis and proliferation assays. Very good reactivity both with dsDNA and ssDNA on NC-dotblots has been observed. The minimal size for DNA binding for this antibody is &gt;16 bases and there is an inverse proportionality between binding and ionic strength. Abcam recommended secondaries - Goat Anti-Mouse HRP (ab205719) and Goat Anti-Mouse Alexa Fluor® 488 (ab150113). See other anti-mouse secondary antibodies that can be used with this antibody.</td>
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## Properties

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<tbody>
<tr>
<td><strong>Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Storage instructions</strong></td>
<td>Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.</td>
</tr>
<tr>
<td><strong>Storage buffer</strong></td>
<td>pH: 7.40</td>
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<tr>
<td></td>
<td>Preservative: 0.1% Sodium azide</td>
</tr>
<tr>
<td></td>
<td>Constituents: PBS, 2.9% Sodium chloride</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>Protein A purified</td>
</tr>
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<td><strong>Primary antibody notes</strong></td>
<td>This antibody has been shown to be useful, using immunofluorescence, in the detection of dsDNA in fx. Crithidia luciliae -a monoflagellate protozoan, containing a giant mitochondrion. The antibody</td>
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**Clonality**
Monoclonal

**Clone number**
35I9 DNA

**Myeloma**
x63-Ag8.653

**Isotype**
IgG2a

**Light chain type**
kappa

### Applications

Our [Abpromise guarantee](#) covers the use of **ab27156** 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>
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<tr>
<td>IHC-Fr</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>Dot blot</td>
<td></td>
<td>1/1000.</td>
</tr>
<tr>
<td>ICC</td>
<td>★★★★★★</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td>★★★★★★</td>
<td>1/1000.</td>
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### Target

**Relevance**

dsDNA (double stranded deoxyribonucleic acid) is the genetic material of all cells and many viruses and is a polymer of nucleotides. The monomer consists of phosphorylated 2-deoxyribose N-glycosidically linked to one of four bases, adenine, cytosine, guanine or thymine. These are linked together by 3’,5’-phosphodiester bridges. In the Watson-Crick double-helix model, two complementary strands are wound in a right-handed helix and held together by hydrogen bonds between complementary base pairs.

**Cellular localization**

Nuclear

### Images
ab27156 staining Drosophila melanogaster larval brain cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with formaldehyde, permeabilized with Triton 0.3% and blocked with 10% serum for 30 minutes at 25°C. Samples were incubated with primary antibody (1/500 dilution) in PBS/Triton 0.3% for 12 hour at 4°C. An Alexa Fluor® 488-conjugated Goat polyclonal to mouse was used as secondary antibody.

Example of Indirect ELISA.
Sample: HEK293 cells.
Blocking step using 5% BSA for 1 hour at 25°C.
Paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized mouse MEF cells stained for ds DNA (red) using ab27156 at 1/400 dilution in ICC/IF. A Donkey anti-mouse Alexa Fluor® 568 at 1/400 dilution was used as secondary. MEF nucleus stained blue.

ab27156 at 1/1000 staining Stylonychia lemnæe cells (isolated macronucleus anlagen) by ICC. The cells were methanol fixed and incubated with the antibody for 1 hour. A Cy3 ® conjugated goat anti-mouse antibody was used as the secondary.

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