

## Product datasheet

# Anti-DDIT3 antibody [9C8] - BSA and Azide free ab233121

[3 Images](#)

### Overview

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<b>Product name</b>	Anti-DDIT3 antibody [9C8] - BSA and Azide free
<b>Description</b>	Mouse monoclonal [9C8] to DDIT3 - BSA and Azide free
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Other Immunogen Type corresponding to DDIT3. A bacterially expressed, mouse DDIT3 fusion protein.
<b>Epitope</b>	ab233121 has been shown to recognize an epitope in the N-terminal region of DDIT3.
<b>Positive control</b>	WB: HeLa cells treated with 2ug/ml and 20ug/ml tunicamycin for 4 hours. ICC/IF: HeLa (untreated and tunicamycin-treated); SKNSH cells treated with deltamethrin.
<b>General notes</b>	<p>This antibody clone is manufactured by Abcam. If you require a different buffer formulation or a particular conjugate for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>ab233121 is a PBS only format of <a href="#">ab11419</a>.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions,</p>

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, as well as customer reviews and Q&As.

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	9C8
<b>Isotype</b>	IgG2b
<b>Light chain type</b>	kappa

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab233121** in the following tested applications.

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

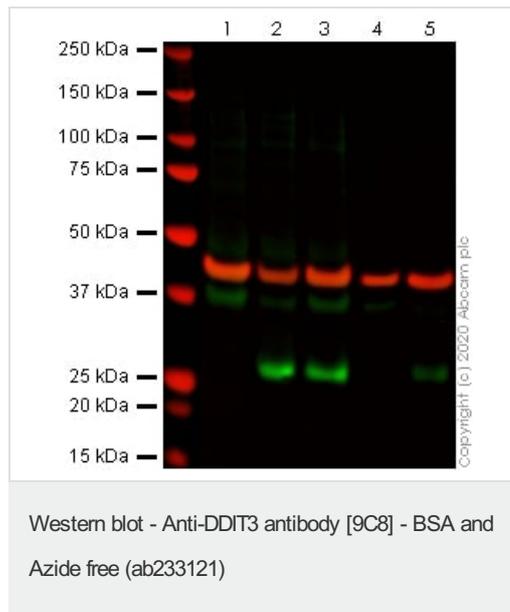
Application	Abreviews	Notes
WB		Use a concentration of 5 µg/ml. Detects a band of approximately 31 kDa (predicted molecular weight: 19 kDa). Please note that under normal cellular conditions this protein is not expressed in detectable levels, but is highly upregulated during times of cellular/ER stress. It is strongly recommended to run a positive control along your samples to confirm the expression levels of protein.
IP		Use at an assay dependent concentration.
ICC/IF		Use a concentration of 5 µg/ml.

## Target

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<b>Function</b>	Inhibits the DNA-binding activity of C/EBP and LAP by forming heterodimers that cannot bind DNA.
<b>Involvement in disease</b>	Note=A chromosomal aberration involving DDIT3 is found in a patient with malignant myxoid liposarcoma. Translocation t(12;16)(q13;p11) with FUS.
<b>Sequence similarities</b>	Belongs to the bZIP family. Contains 1 bZIP domain.
<b>Cellular localization</b>	Nucleus.

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**All lanes :** Anti-DDIT3 antibody [9C8] ([ab11419](#)) at 5 µg/ml

**Lane 1 :** HeLa w/c control cell lysate at 40 µg

**Lane 2 :** HeLa cells treated with 2ug/ml tunicamycin for 4 hours, whole cell lysate cell lysate at 40 µg

**Lane 3 :** HeLa cells treated with 20ug/ml tunicamycin for 4 hours, whole cell lysate cell lysate at 40 µg

**Lane 4 :** HepG2 cell lysate at 20 µg

**Lane 5 :** NIH3T3 cell lysate at 20 µg

Performed under reducing conditions.

**Predicted band size:** 19 kDa

**Observed band size:** 27 kDa

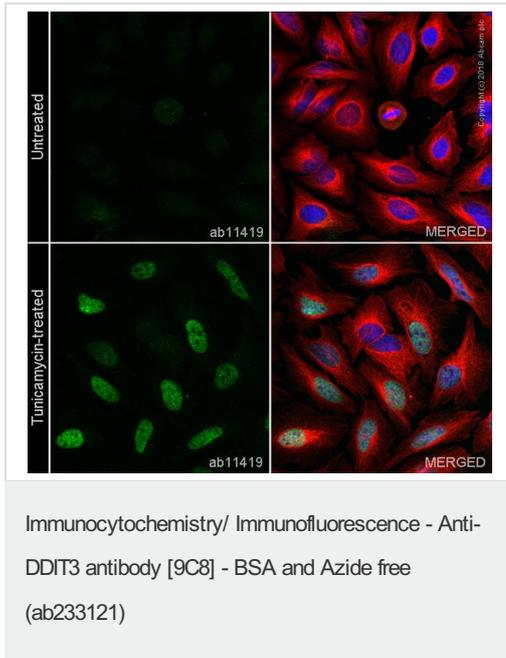
[why is the actual band size different from the predicted?](#)

This data was developed using the same antibody clone in a different buffer formulation ([ab11419](#)).

**Lanes 1 - 5:** Merged signal (red and green). Green - [ab11419](#) observed at 27 kDa. Red - loading control, Rabbit anti Actin observed at 42kDa.

[ab11419](#) was shown to react with DDIT3 in western blot.

Membranes were blocked in 3% milk in TBS-T (0.1% Tween<sup>®</sup>) before incubation with [ab11419](#) and Rabbit anti Actin overnight at 4°C at 5 µg/ml and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed ([ab216772](#)) and Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed ([ab216777](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

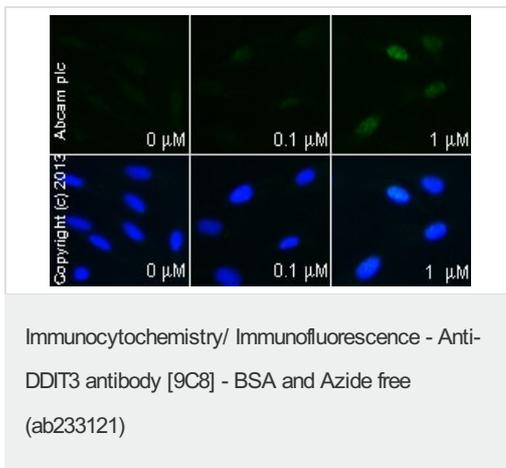


[ab11419](#) staining DDIT3 in HeLa cells +/- Tunicamycin (1.5µM, 6 hours).

The cells were fixed with 4% PFA (10min), permeabilized with 0.1% Triton-X for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at +4°C with [ab11419](#) at 5µg/ml and [ab6046](#), Rabbit polyclonal to beta Tubulin - Loading Control, at 1/1000 dilution. Cells were then incubated with [ab150117](#), Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (shown in green) and [ab150084](#), Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolor red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, and sodium azide ([ab11419](#)).



[ab11419](#) staining DDIT3 in SKNSH cells treated with deltamethrin ([ab141019](#)), by ICC/IF. Increase of DDIT3 expression correlates with increased concentration of deltamethrin, as described in literature.

The cells were incubated at 37°C for 48 hours in media containing different concentrations of [ab141019](#) (deltamethrin) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with [ab11419](#) (10 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight® 488 anti-mouse polyclonal antibody ([ab96879](#)) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, and sodium azide ([ab11419](#)).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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