abcam

Product datasheet

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



3 References 5 图像

概述

产品名称 Anti-DDIT3抗体[9C8] - BSA and Azide free

小鼠单**克隆抗体**[9C8] to DDIT3 - BSA and Azide free

宿主 Mouse

经测试应用 适用于: WB, ICC/IF

种属反应性 与反应: Mouse, Human

预测可用于: Rat 📤

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

表位 ab233121 has been shown to recognize an epitope in the N-terminal region of DDIT3.

阳性对照 WB: SW480 cell lysates, HeLa cells treated with 2ug/ml tunicamycin for 4 hours. ICC/IF: HeLa

(untreated and tunicamycin-treated).

常规说明 ab233121 is the carrier-free version of ab11419.

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

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contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at +4°C. Do

Not Freeze.

存储溶液 Constituent: PBS

无载体 是

纯**度** Protein G purified

 克隆
 单克隆

 克隆编号
 9C8

 同种型
 lgG2b

 轻链类型
 kappa

应用

The Abpromise guarantee Abpromise™承诺保证使用ab233121于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use a concentration of 5 μ g/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.
ICC/IF		Use a concentration of 5 μg/ml.

靶标

功能 Inhibits the DNA-binding activity of C/EBP and LAP by forming heterodimers that cannot bind

DNA.

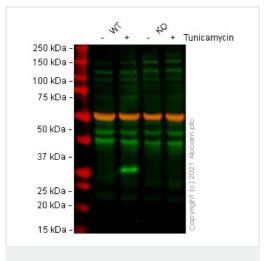
疾病相关 Note=A chromosomal aberration involving DDIT3 is found in a patient with malignant myxoid

liposarcoma. Translocation t(12;16)(q13;p11) with FUS.

序列相似性 Belongs to the bZIP family.

Contains 1 bZIP domain.

细胞定位 Nucleus.



Western blot - Anti-DDIT3 antibody [9C8] - BSA and Azide free (ab233121)

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

Lane 1: Wild-type HeLa Vehicle Control Tunicamycin (20ug/mL, 4h) cell lysate

Lane 2: Wild-type HeLa Treated Tunicamycin (20ug/mL, 4h) cell lysate

Lane 3: DDIT3 knockout HeLa Vehicle Control Tunicamycin (20ug/mL, 4h) cell lysate

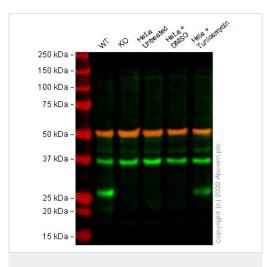
Lane 4: DDIT3 knockout HeLa Treated Tunicamycin (20ug/mL, 4h) cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 19 kDa **Observed band size:** 25 kDa

False colour image of Western blot: Anti-DDIT3 antibody [9C8] staining at 5 µg/ml, shown in green; Rabbit anti-alpha Tubulin antibody [EP1332Y] (ab52866) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab11419 was shown to bind specifically to DDIT3. A band was observed at 25 kDa in wild-type y cell lysates with no signal observed at this size in DDIT3 knockout cell line ab265760 (knockout cell lysate ab256889). To generate this image, wild-type and DDIT3 knockout y cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (ab216772) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (ab216777) at 1/20000 dilution



Western blot - Anti-DDIT3 antibody [9C8] - BSA and Azide free (ab233121)

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

Lane 1: Wild-type SW480 cell lysate

Lane 2: DDIT3 knockout SW480 cell lysate

Lane 3: Untreated HeLa cell lysate

Lane 4: HeLa + DMSO control cell lysate

Lane 5: HeLa + tunicamycin (20ug/mL,4 hours) cell lysate

Lysates/proteins at 20 µg per lane.

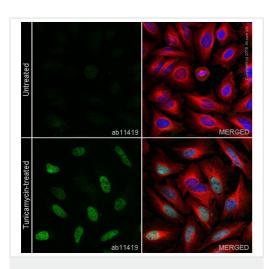
Performed under reducing conditions.

Predicted band size: 19 kDa
Observed band size: 26 kDa

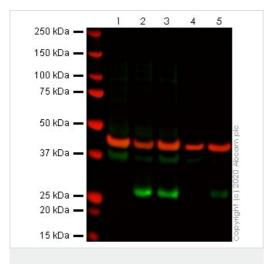
This data was developed using the same antibody clone in a different buffer formulation (ab11419).

Lanes 1 - 5: Merged signal (red and green). Green - <u>ab11419</u> observed at 26 kDa. Red - loading control <u>ab52866</u> (Rabbit antialpha Tubulin antibody [EP1332Y]) observed at 55kDa.

<u>ab11419</u> was shown to react with DDIT3 in wild-type SW480 cells in western blot with loss of signal observed in DDIT3 knockout sample. Wild-type and DDIT3 knockout SW480 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with <u>ab11419</u> and <u>ab52866</u> (Rabbit anti-alpha Tubulin antibody [EP1332Y]) overnight at 4°C at 5 μ g/ml and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse lgG H&L (IRDye® 800CW) preabsorbed (<u>ab216772</u>) and Goat anti-Rabbit lgG H&L (IRDye® 680RD) preabsorbed (<u>ab216777</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-DDIT3 antibody [9C8] - BSA and Azide free (ab233121)



Western blot - Anti-DDIT3 antibody [9C8] - BSA and Azide free (ab233121)

<u>**ab11419**</u> staining DDIT3 in HeLa cells +/- Tunicamycin (1.5 μ M, 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).

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

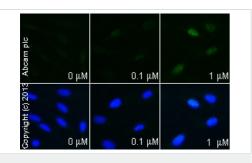
Performed under reducing conditions.

Predicted band size: 19 kDa Observed band size: 27 kDa

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

Lanes 1 - 5: Merged signal (red and green). Green - <u>ab11419</u> observed at 27 kDa. Red - loading control, Rabbit anti Actin observed at 42kDa.

<u>ab11419</u> was shown to react with DDIT3 in western blot. Membranes were blocked in 3% milk in TBS-T (0.1% Tween[®]) before incubation with <u>ab11419</u> 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 lgG H&L (IRDye[®] 800CW) preabsorbed (<u>ab216772</u>) and Goat anti-Rabbit lgG H&L (IRDye[®] 680RD) preabsorbed (<u>ab216777</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-DDIT3 antibody [9C8] - BSA and Azide free (ab233121) <u>ab11419</u> staining DDIT3 in SKNSH cells treated with deltamethrin (<u>ab141019</u>), 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 <u>ab141019</u> (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 <u>ab11419</u> (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 (<u>ab96879</u>) 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).

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