

## Product datasheet

# Anti-5-carboxylcytosine (5-caC) antibody ab231801

[3 Images](#)

### Overview

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<b>Product name</b>	Anti-5-carboxylcytosine (5-caC) antibody
<b>Description</b>	Rabbit polyclonal to 5-carboxylcytosine (5-caC)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP, Dot blot, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Species independent
<b>Immunogen</b>	Chemical/ Small Molecule corresponding to 5-carboxylcytosine (5-caC) conjugated to bovine serum albumin.
<b>Positive control</b>	ICC/IF: HEK-293T cells transfected with mouse FLAG-tagged wild-type Tet1 (Tet1 CD).
<b>General notes</b>	<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&amp;As</p>

### 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 -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.05% Sodium azide Constituents: PBS, 30% Glycerol
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

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## The Abpromise guarantee

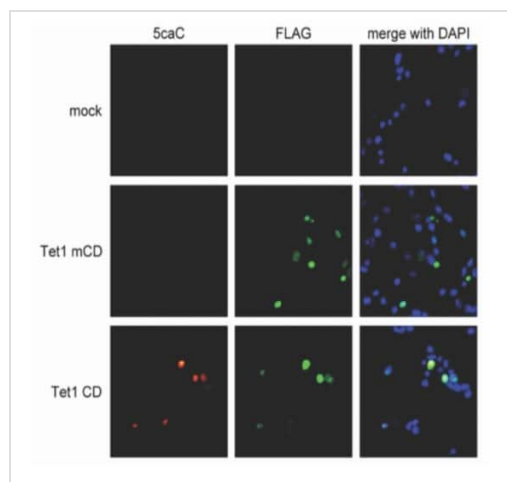
Our **Abpromise guarantee** covers the use of ab231801 in the following tested applications.

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

Application	Abreviews	Notes
IP		Use at an assay dependent concentration. 4 µg per IP.
Dot blot		1/500 - 1/1000.
ICC/IF		1/500.

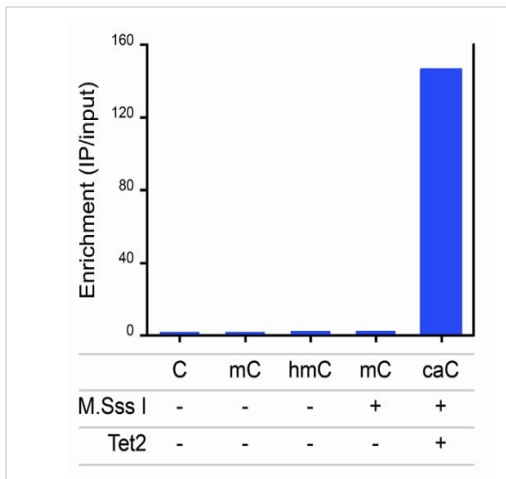
## Target

## Images



HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cells transfected with either the mouse FLAG-tagged wild-type Tet1 (Tet1 CD) or the catalytically inactive FLAG-tagged C-terminal domain of Tet1 (Tet1 mCD) stained for 5-carboxylcytosine (5-caC) using ab231801 at a dilution of 1/500 in ICC/IF.

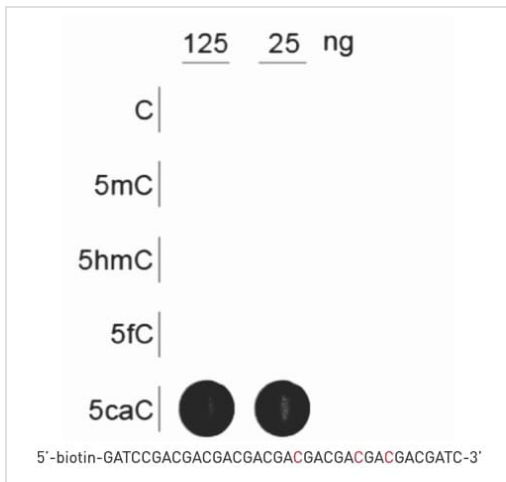
Immunocytochemistry/ Immunofluorescence - Anti-5-carboxylcytosine (5-caC) antibody (ab231801)



Immunoprecipitation - Anti-5-carboxylcytosine (5-caC) antibody (ab231801)

Immunoprecipitation was performed with ab231801 on 2 µg of J1 ES genomic DNA, spiked with 1 µg of a control DNA fragment (approximately 700 bp from the RFP (Ring finger protein) gene) containing different cytosine modifications.

The mC and hmC control DNA was generated by PCR with the corresponding nucleotide. The caC control fragment was obtained by in vitro methylation using M.SssI methyltransferase followed by oxidation with purified Tet2. The IP'd DNA was subsequently analysed by qPCR using primers specific for the control DNA fragments and for GAPDH, used as a negative control. Image shows the enrichment calculated as the ratio of the recovery of the control DNA versus the recovery of the GAPDH negative control.



Dot Blot - Anti-5-carboxylcytosine (5-caC) antibody (ab231801)

To demonstrate the specificity of ab231801 a Dot Blot analysis was performed using synthetic oligonucleotides containing different modified C-bases (indicated in red).

125 and 25 ng of the respective oligo's were bound to a Streptavidin-coated multi-well plate. ab231801 was used at a dilution of 1:1,000. The binding of antibody to the DNA was measured by ECL chemiluminescence.

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

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- Extensive multi-media technical resources to help you
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