

Product datasheet

Anti-5-methylcytosine (5-mC) antibody [33D3] ab10805

★★★★★ [12 Abreviews](#) [157 References](#) [1 Image](#)

Overview

Product name	Anti-5-methylcytosine (5-mC) antibody [33D3]
Description	Mouse monoclonal [33D3] to 5-methylcytosine (5-mC)
Host species	Mouse
Specificity	<p>Modified base 5-methylcytidine found in DNA of plants and vertebrates.</p> <p>Raised against the modified ribonucleoside. Specific for the presence of a methyl group on carbon 5 of the pyrimidine ring.</p>
Tested applications	<p>Suitable for: IHC-P, IP, Southern Blot, Flow Cyt, IHC-Fr</p> <p>Unsuitable for: ICC</p>
Species reactivity	Reacts with: Species independent
Immunogen	Chemical/ Small Molecule corresponding to 5-methylcytosine (5-mC).
General notes	<p>Storage in frost-free freezers is not recommended. Should this product contain a precipitate microcentrifugation before use. While older lots have performed well in ICC, we have received inconsistent results with the latest lots. Unfortunately, we can no longer guarantee this antibody for use in ICC.</p> <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&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.40</p> <p>Constituents: PBS, 0.876% Sodium chloride</p>
Purity	Protein A purified
Primary antibody notes	Ab10805 recognises the modified base 5-methylcytidine found in DNA of plants and vertebrates.

DNA methylation is a DNA modification process, which is involved in the control of gene expression. Reports suggest that in tumours, DNA is frequently globally hypomethylated compared to the DNA from normal tissue.

Clonality	Monoclonal
Clone number	33D3
Myeloma	Sp2/0-Ag14
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab10805 in the following tested applications.

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

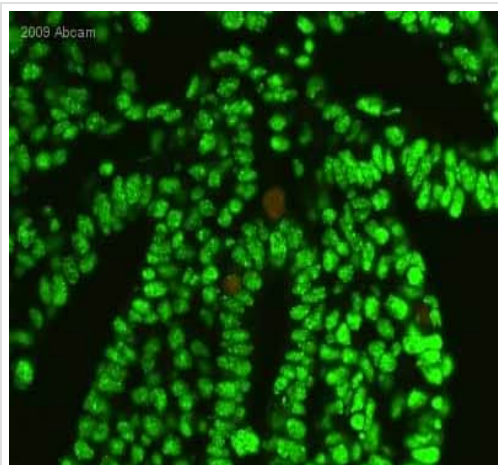
Application	Abreviews	Notes
IHC-P	★★★★☆ (4)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP	★★★★★ (1)	Use at an assay dependent concentration.
Southern Blot		1/200.
Flow Cyt	★★★★★ (1)	Use at an assay dependent concentration. Use 10ul of working dilution to label 1000000 cells in 100ul. (see Habib, M. et al. (1999)). ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-Fr		Use at an assay dependent concentration.

Application notes Is unsuitable for ICC.

Target

Form The native context of double-stranded DNA may obstruct antibody binding to 5-methylcytosine. For successful detection of 5-methylcytosine, we recommend that the DNA is denatured to make the nucleotides accessible for the antibody. Denaturing methods vary depending on each application.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5-methylcytosine (5-mC) antibody [33D3] (ab10805)

This image is courtesy of an Abreview submitted by Ms Sara Maj Wätjen Hyldig

ab10805 staining 5-Methyl Cytidine in pig embryo (15 to 17 days) tissue section by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Tissue underwent fixation in paraformaldehyde, heat mediated antigen retrieval in Tris-EDTA buffer, permeabilization in Triton X-100 and blocking in 2% BSA for 10 minutes at 25°C. The primary antibody was diluted, 1/100 (PBS + 2% BSA) and incubated with sample for 1 hour at 25°C. An Alexa Fluor® 488 conjugated donkey polyclonal to mouse at 1/250 dilution, was used as secondary.

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

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