

Product datasheet

Anti-KMT2B / MLL4 antibody [4C10] ab56770

★★★★★ [1 Abreviews](#) [1 References](#) [2 Images](#)

Overview

Product name	Anti-KMT2B / MLL4 antibody [4C10]
Description	Mouse monoclonal [4C10] to KMT2B / MLL4
Host species	Mouse
Tested applications	Suitable for: WB, Flow Cyt
Species reactivity	Reacts with: Human, Recombinant fragment
Immunogen	Recombinant fragment (proprietary-tag) corresponding to Human KMT2B/ MLL4 aa 813-904. Entrez gene ID: 9757 Sequence: KVAAS MPLSPGGQMEEVAGAVKQISDRGPVRSEDESVE AKRERPSGPESP VQGPRIKHVCRHAAVALGQARAMVPEDVPRLSALPLRDR QDL

Database link: [Q9UMN6](#)

 [Run BLAST with](#)

 [Run BLAST with](#)

General notes

This product was changed from ascites to tissue culture supernatant on 11th June 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.4

Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	4C10
Isotype	IgG1
Light chain type	kappa

Applications

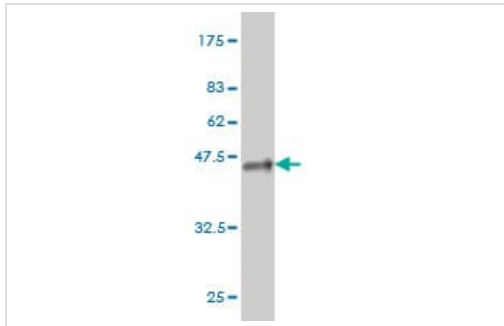
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab56770 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	Use at an assay dependent concentration. This antibody has only been tested in WB against the recombinant fragment used as immunogen. We have no data on the detection of endogenous protein.
Flow Cyt		Use at an assay dependent concentration. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function	Histone methyltransferase. Methylates 'Lys-4' of histone H3. H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. Plays a central role in beta-globin locus transcription regulation by being recruited by NFE2. Plays an important role in controlling bulk H3K4me during oocyte growth and preimplantation development. Required during the transcriptionally active period of oocyte growth for the establishment and/or maintenance of bulk H3K4 trimethylation (H3K4me3), global transcriptional silencing that precedes resumption of meiosis, oocyte survival and normal zygotic genome activation.
Tissue specificity	Widely expressed. Highest levels in testis. Also found in brain, bone marrow, heart, muscle, kidney, placenta, spleen, thymus, prostate, ovary, intestine, colon, peripheral blood lymphocytes and pancreas. Often amplified in pancreatic carcinomas.
Sequence similarities	Belongs to the class V-like SAM-binding methyltransferase superfamily. Histone-lysine methyltransferase family. TRX/MLL subfamily. Contains 3 A.T hook DNA-binding domains. Contains 1 CXXC-type zinc finger. Contains 1 FYR C-terminal domain. Contains 1 FYR N-terminal domain. Contains 3 PHD-type zinc fingers. Contains 1 post-SET domain. Contains 1 SET domain.
Cellular localization	Nucleus.

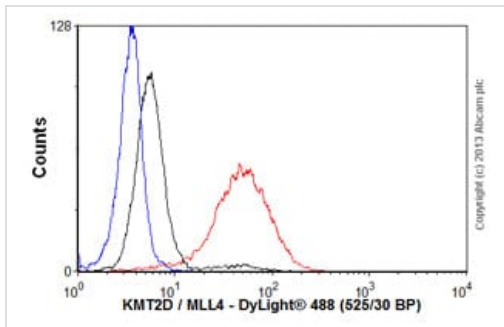
Images



Western blot - Anti-KMT2B / MLL4 antibody [4C10] (ab56770)

Western blot against tagged recombinant protein immunogen using ab56770 MLL4 antibody at 1ug/ml. Predicted band size of immunogen is 36 kDa

This image was generated using the ascites version of the product.



Flow Cytometry - Anti-KMT2B / MLL4 antibody [4C10] (ab56770)

Overlay histogram showing HL60 cells stained with ab56770 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab56770, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

This image was generated using the ascites version of the product.

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

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