abcam

Product datasheet

Anti-KMT2D / MLL2 antibody ab231239

1 References 1 Image

Overview

Product name	Anti-KMT2D / MLL2 antibody
Description	Rabbit polyclonal to KMT2D / MLL2
Host species	Rabbit
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Mouse
Immunogen	Synthetic peptide corresponding to Mouse KMT2D/ MLL2 (internal sequence) conjugated to keyhole limpet haemocyanin. Three peptides. Database link: **Q6PDK2**
Positive control	WB: Mouse embryonic stem cell (E14Tg2a) whole cell lysate.
General notes	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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide
Purity	Whole antiserum
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee	Our **Abpromise guarantee** covers the use of ab231239 in the following tested applications.

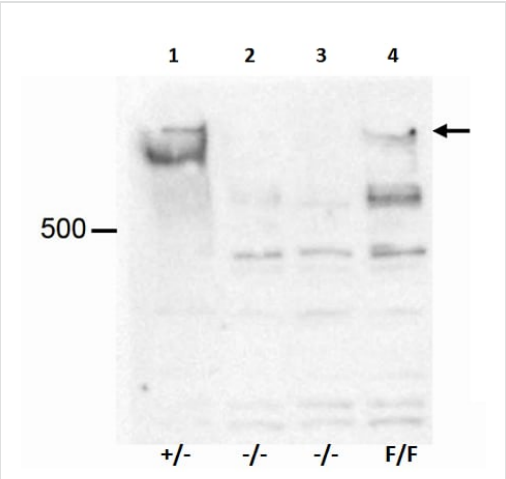
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500.

Target

Function	Histone methyltransferase. Methylates 'Lys-4' of histone H3 (H3K4me). H3K4me represents a specific tag for epigenetic transcriptional activation. Plays a central role in beta-globin locus transcription regulation by being recruited by NFE2. Acts as a coactivator for estrogen receptor by being recruited by ESR1, thereby activating transcription. 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 preceeds resumption of meiosis, oocyte survival and normal zygotic genome activation.
Tissue specificity	Expressed in most adult tissues, including a variety of hematoipoietic cells, with the exception of the liver.
Involvement in disease	Defects in MLL2 are the cause of Kabuki syndrome (KABS) [MIM:147920]. It is a congenital mental retardation syndrome with additional features, including postnatal dwarfism, a peculiar facies characterized by long palpebral fissures with eversion of the lateral third of the lower eyelids, a broad and depressed nasal tip, large prominent earlobes, a cleft or high-arched palate, scoliosis, short fifth finger, persistence of fingerpads, radiographic abnormalities of the vertebrae, hands, and hip joints, and recurrent otitis media in infancy.
Sequence similarities	Belongs to the histone-lysine methyltransferase family. TRX/MLL subfamily. Contains 1 FY-rich C-terminal domain. Contains 1 FY-rich N-terminal domain. Contains 5 PHD-type zinc fingers. Contains 1 post-SET domain. Contains 4 RING-type zinc fingers. Contains 1 SET domain.
Domain	LXXLL motifs 5 and 6 are essential for the association with ESR1 nuclear receptor.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Cellular localization	Nucleus.

Images



Western blot - Anti-KMT2D / MLL2 antibody (ab231239)

All lanes : Anti-KMT2D / MLL2 antibody (ab231239) at 1/500 dilution

Lane 1 : Mouse embryonic stem cells (E14Tg2a) whole cell lysate (Heterozygous knockout)
Lanes 2-3 : Mouse embryonic stem cells (E14Tg2a) whole cell lysate (Homozygous knockout)
Lane 4 : Mouse embryonic stem cells (E14Tg2a) whole cell lysate (flp recombined)

Cells homozygous for the targeted KMT2D / MLL2 allele (-/-) show a complete loss of KMT2D / MLL2 protein, whereas the KMT2D / MLL2 protein was detected in fp-recombined ES cells (F/F) and heterozygously targeted ES cells (+/-).

Dilution buffer: PBS-Tween containing 5% skimmed milk.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors