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KMT2B / MLL4 Antibody (C-Terminus)

Goat Polyclonal Antibody
Catalog # ALS12854

Specification

KMT2B / MLL4 Antibody (C-Terminus) - Product Information

Application	**IHC**
Primary Accession	Q9UMN6
Reactivity	**Human, Mouse, Rat, Zebrafish, Monkey, Pig, Bovine**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**294kDa KDa**

KMT2B / MLL4 Antibody (C-Terminus) - Additional Information

Gene ID 9757

Other Names
Histone-lysine N-methyltransferase 2B, Lysine N-methyltransferase 2B, 2.1.1.43, Myeloid/lymphoid or mixed-lineage leukemia protein 4, Trithorax homolog 2, WW domain-binding protein 7, WBP-7, KMT2B, HRX2, KIAA0304, MLL2, MLL4, TRX2, WBP7

Target/Specificity
Human MLL4.

Reconstitution & Storage
Store at -20°C. Minimize freezing and thawing.

Precautions
KMT2B / MLL4 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

KMT2B / MLL4 Antibody (C-Terminus) - Protein Information

Name KMT2B

Synonyms HRX2, KIAA0304, MLL2, MLL4, TRX2, WBP7

Function
Histone methyltransferase that catalyzes methyl group transfer from S-adenosyl-L-methionine to the epsilon-amino group of 'Lys-4' of histone H3 (H3K4) via a non-processive mechanism. Part of chromatin remodeling machinery predominantly forms H3K4me1 and H3K4me2 methylation marks at active chromatin sites where transcription and DNA repair take place (PubMed:17707229, PubMed:25561738). Likely plays a redundant role with KMT2C in enriching H3K4me1 marks on primed and active enhancer elements (PubMed:<a href="http://www.uniprot.org/citations/24081332"

target="_blank">24081332). Plays a central role in beta-globin locus transcription regulation by being recruited by NFE2 (PubMed:17707229). Plays an important role in controlling bulk H3K4me during oocyte growth and preimplantation development (By similarity). 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 (By similarity).

Cellular Location
Nucleus.

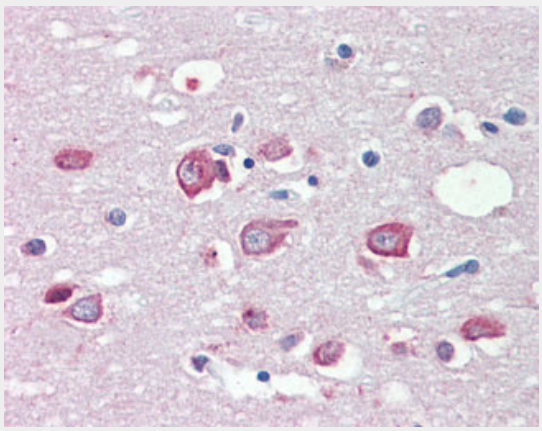
Tissue Location
Widely expressed. Highest levels in testis. Also found in brain with higher expression in the cerebellum than in any other region, bone marrow, heart, muscle, kidney, placenta, spleen, thymus, prostate, ovary, intestine, colon, peripheral blood lymphocytes and pancreas. Often amplified in pancreatic carcinomas

KMT2B / MLL4 Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KMT2B / MLL4 Antibody (C-Terminus) - Images



Anti-MLL4 antibody IHC of human brain, cortex.

KMT2B / MLL4 Antibody (C-Terminus) - Background

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 preceeds resumption of meiosis, oocyte survival and normal zygotic genome activation.

KMT2B / MLL4 Antibody (C-Terminus) - References

Angrand P.-O.,et al.Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
Grimwood J.,et al.Nature 428:529-535(2004).
Huntsman D.G.,et al.Oncogene 18:7975-7984(1999).
Nagase T.,et al.DNA Res. 4:141-150(1997).
FitzGerald K.T.,et al.Genomics 59:187-192(1999).