

MLL4 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51688**Specification**

MLL4 Antibody - Product Information

Application	WB, E
Primary Accession	Q9UMN6
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36 KDa

MLL4 Antibody - Additional Information**Gene ID** 9757**Other Names**

Histone-lysine N-methyltransferase 2B, Lysine N-methyltransferase 2B, 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

Dilution

WB~~1:1000

E~~N/A

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

MLL4 Antibody - 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](http://www.uniprot.org/citations/17707229), PubMed: [25561738](http://www.uniprot.org/citations/25561738)). Likely plays a redundant role with KMT2C in enriching H3K4me1 marks on primed and active enhancer elements (PubMed: [24081332](http://www.uniprot.org/citations/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 precedes 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

MLL4 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MLL4 Antibody - Images**MLL4 Antibody - 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 precedes resumption of meiosis, oocyte survival and normal zygotic genome activation.

MLL4 Antibody - 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).