

MLL4 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP6185a**Specification**

MLL4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession [O9UMN6](#)
Other Accession [NP_055542](#)

MLL4 Antibody (C-term) Blocking Peptide - 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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6185a](/product/products/AP6185a) was selected from the C-term region of human MLL4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MLL4 Antibody (C-term) Blocking Peptide - 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: [25561738](http://www.uniprot.org/citations/25561738), PubMed: [17707229](http://www.uniprot.org/citations/17707229)). 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](http://www.uniprot.org/citations/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 (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

MLL4 Antibody (C-term) Blocking Peptide - Images**MLL4 Antibody (C-term) Blocking Peptide - Background**

MLL4 contains multiple domains including a CXXC zinc finger, three PHD zinc fingers, two FY-rich domains, and a SET (suppressor of variegation, enhancer of zeste, and trithorax) domain. The SET domain is a conserved C-terminal domain that characterizes proteins of the MLL (mixed-lineage leukemia) family. This gene is ubiquitously expressed in adult tissues. It is also amplified in solid tumor cell lines, and may be involved in human cancer.

MLL4 Antibody (C-term) Blocking Peptide - References

Huntsman, D.G., et al., *Oncogene* 18(56):7975-7984 (1999). FitzGerald, K.T., et al., *Genomics* 59(2):187-192 (1999).