

MLL3 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8552b

Specification

MLL3 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype

WB,E <u>Q8NEZ4</u> Human Mouse monoclonal lgG1,k

MLL3 Antibody - Additional Information

Gene ID 58508

Other Names

Histone-lysine N-methyltransferase 2C, Lysine N-methyltransferase 2C, 2.1.1.43, Homologous to ALR protein, Myeloid/lymphoid or mixed-lineage leukemia protein 3, KMT2C, HALR, KIAA1506, MLL3

Target/Specificity

This MLL3 antibody is generated from a mouse immunized with a recombinant protein of human MLL3.

Dilution

WB~~1:2000

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MLL3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MLL3 Antibody - Protein Information

Name KMT2C

Synonyms HALR, KIAA1506, MLL3

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)



(PubMed: <u>25561738</u>). Part of chromatin remodeling machinery predominantly forms H3K4me1 methylation marks at active chromatin sites where transcription and DNA repair take place (PubMed: <u>22266653</u>, PubMed: <u>24081332</u>, PubMed: <u>25561738</u>). Likely plays a redundant role with KMT2D in enriching H3K4me1 mark on primed and active enhancer elements (PubMed: <u>24081332</u>).

Cellular Location

Nucleus.

Tissue Location

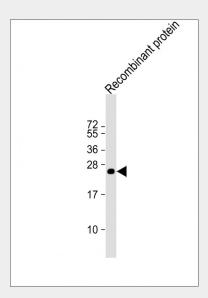
Highly expressed in testis and ovary, followed by brain and liver. Also expressed in placenta, peripherical blood, fetal thymus, heart, lung and kidney. Within brain, expression was highest in hippocampus, caudate nucleus, and substantia nigra. Not detected in skeletal muscle and fetal liver

MLL3 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

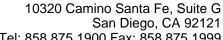
MLL3 Antibody - Images

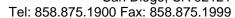


Anti-MLL3 Antibody at 1:2000 dilution + Recombinant protein at 20 ng per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 541 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

MLL3 Antibody - Background

Histone methyltransferase. Methylates 'Lys-4' of histone H3. H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. Central component of the MLL2/3 complex, a







coactivator complex of nuclear receptors, involved in transcriptional coactivation. KMT2C/MLL3 may be a catalytic subunit of this complex. May be involved in leukemogenesis and developmental disorder.

MLL3 Antibody - References

Ruault M., et al. Gene 284:73-81(2002). Tan Y.C., et al. Cancer Detect. Prev. 25:454-469(2001). Hillier L.W., et al. Nature 424:157-164(2003). Nagase T., et al. DNA Res. 7:143-150(2000). Nakajima D., et al. DNA Res. 9:99-106(2002).