10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MLL3 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8552b

Product Information

Application	WB, E
Primary Accession	Q8NEZ4
Reactivity	Human, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1686CT202.60.69
Calculated MW	541370

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 E~~Use at an assay dependent concentration.
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.

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

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

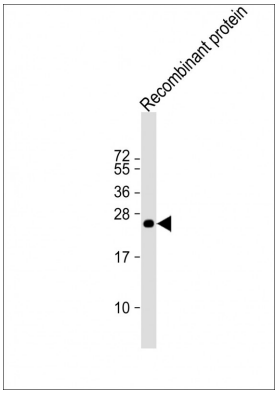
Background

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.

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).

Images



Anti-MLL3 Antibody at 1:2000 dilution + Recombinant protein Lysates/proteins 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.