

## MLL3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP22079a

### Product Information

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<b>Application</b>	IHC-P, E
<b>Primary Accession</b>	<a href="#">Q8NEZ4</a>
<b>Other Accession</b>	<a href="#">Q8BRH4</a>
<b>Reactivity</b>	Human, Mouse
<b>Predicted</b>	Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB52487
<b>Calculated MW</b>	541370

### Additional Information

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<b>Gene ID</b>	58508
<b>Other Names</b>	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
<b>Target/Specificity</b>	This MLL3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1142-1175 amino acids from the N-terminal region of human MLL3.
<b>Dilution</b>	IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	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.
<b>Precautions</b>	MLL3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

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<b>Name</b>	KMT2C
<b>Synonyms</b>	HALR, KIAA1506, MLL3

<b>Function</b>	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: <a href="#">25561738</a> ). Part of chromatin remodeling machinery predominantly forms H3K4me1 methylation marks at active chromatin sites where transcription and DNA repair take place (PubMed: <a href="#">22266653</a> , PubMed: <a href="#">24081332</a> , PubMed: <a href="#">25561738</a> ). Likely plays a redundant role with KMT2D in enriching H3K4me1 mark on primed and active enhancer elements (PubMed: <a href="#">24081332</a> ).
<b>Cellular Location</b>	Nucleus.
<b>Tissue Location</b>	Highly expressed in testis and ovary, followed by brain and liver. Also expressed in placenta, peripheral 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

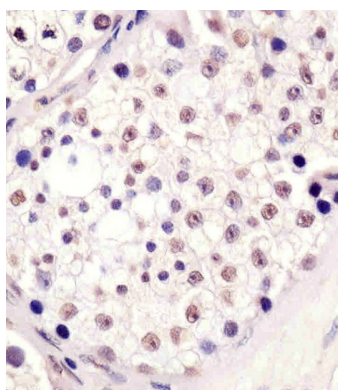
## Background

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



AP22079a staining MLL3 in human testis tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

## Citations

- [The Histone Methyltransferase Mixed Lineage Leukemia \(MLL\) 3 May Play a Potential Role on Clinical Dilated Cardiomyopathy.](#)