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MLL3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22080b

Product Information

Application	E
Primary Accession	Q8NEZ4
Reactivity	Human
Predicted	Rat, Bovine, Canine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52486
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 rabbit immunized with a KLH conjugated synthetic peptide between 3784-3818 amino acids from the C-terminal region of human MLL3.
Dilution	E~~Use at an assay dependent concentration.
Format	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.
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 (C-term) 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

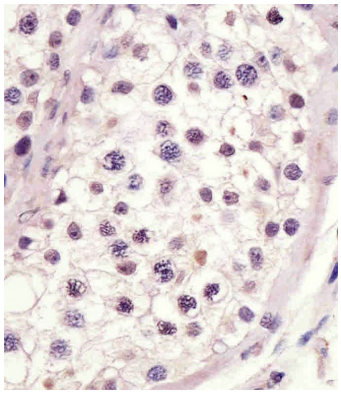
Background

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



AP22080b 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.

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