

### MLL3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22080b

# Specification

# MLL3 Antibody (C-term) - Product Information

Application	IHC-P,E
Primary Accession	<u>Q8NEZ4</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG

# MLL3 Antibody (C-term) - 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 IHC-P~~1:25

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.

# MLL3 Antibody (C-term) - 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**

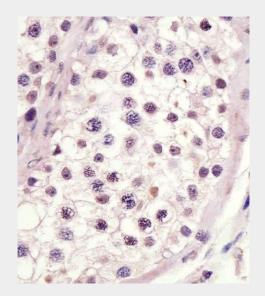
Highly expressed in testis and ovary, followed by brain and liver. Also expressed in placenta, peripherical blood, fetal thymus, heart, lung and kidney. Within brain, expression was highest in hippocampus, caudate nucleus, and substantia nigra. Not detected in skeletal muscle and fetal liver

# MLL3 Antibody (C-term) - Protocols

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

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

#### MLL3 Antibody (C-term) - 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.

# MLL3 Antibody (C-term) - 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 (C-term) - 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).