

MLL Monoclonal Antibody

Catalog No :	YM0444
Reactivity :	Human
Applications :	WB;IHC;IF;ELISA
Target :	MLL
Fields :	>>Lysine degradation;>>Metabolic pathways;>>Cushing syndrome;>>Transcriptional misregulation in cancer
Gene Name :	MLL
Protein Name :	Histone-lysine N-methyltransferase MLL
Human Gene Id :	4297
Human Swiss Prot No :	Q03164
Mouse Swiss Prot No :	P55200
Immunogen :	Purified recombinant fragment of MLL (aa3751-3968) expressed in E. Coli.
Specificity :	MLL Monoclonal Antibody detects endogenous levels of MLL protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	432kD

P References :

1. Genet Couns. 2006;17(2):155-9.
2. Cancer Genet Cytogenet. 2006 Jul 15;168(2):162-7
3. Leukemia. 2007 Feb;21(2):360-2. Epub 2007 Jan 4.

Background :

This gene encodes a transcriptional coactivator that plays an essential role in regulating gene expression during early development and hematopoiesis. The encoded protein contains multiple conserved functional domains. One of these domains, the SET domain, is responsible for its histone H3 lysine 4 (H3K4) methyltransferase activity which mediates chromatin modifications associated with epigenetic transcriptional activation. This protein is processed by the enzyme Taspase 1 into two fragments, MLL-C and MLL-N. These fragments reassociate and further assemble into different multiprotein complexes that regulate the transcription of specific target genes, including many of the HOX genes. Multiple chromosomal translocations involving this gene are the cause of certain acute lymphoid leukemias and acute myeloid leukemias. Alternate splicing results in multiple transcript variants.[provided by RefS

Function :

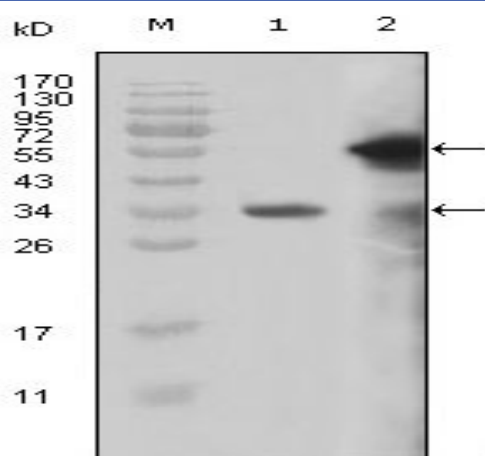
catalytic activity:S-adenosyl-L-methionine + histone L-lysine = S-adenosyl-L-homocysteine + histone N(6)-methyl-L-lysine.,similarity:Contains 1 post-SET domain.,similarity:Contains 1 SET domain.,

Subcellular Location :

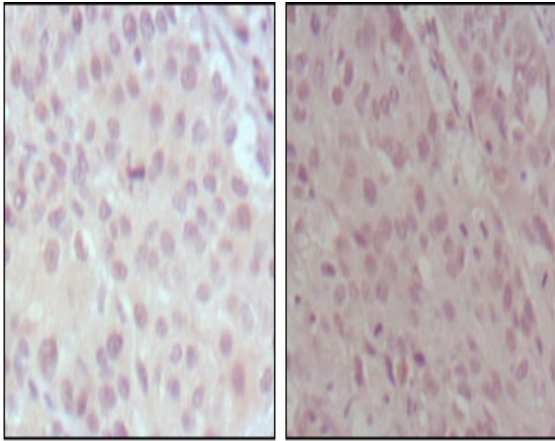
Nucleus .; [MLL cleavage product N320]: Nucleus.; [MLL cleavage product C180]: Nucleus. Localizes to a diffuse nuclear pattern when not associated with MLL cleavage product N320.

Expression :

Heart, lung, brain and T- and B-lymphocytes.

Products Images

Western Blot analysis using MLL Monoclonal Antibody against truncated MLL recombinant protein (1) and truncated GFP-MLL(aa3714-3969) transfected Cos7 cell lysate (2).



Immunohistochemistry analysis of paraffin-embedded human lung cancer (left) and esophagus cancer (right), showing nuclear localization with DAB staining using MLL Monoclonal Antibody.