Product name:	MLL4 Rabbit Polyclonal Antibody
Cat number:	ABN13961
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from human protein . at AA range: 1060-1140
Reactivity:	Human,Mouse
Applications:	IHC 1:50-1:300,ICC/IF 1:50-1:200
Molecular Weight:	298kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a protein which contains multiple domains including a CXXC zinc finger, three PHD zinc fingers, two FY-rich domains, and a SET (suppressor of variegation, enhancer of zeste, and trithorax) domain. The SET domain is a conserved C-terminal domain that characterizes proteins of the MLL (mixed-lineage leukemia) family. This gene is ubiquitously expressed in adult tissues. It is also amplified in solid tumor cell lines, and may be involved in human cancer. Two alternatively spliced transcript variants encoding distinct isoforms have been reported for this gene, however, the full length nature of the shorter transcript is not known. [provided by RefSeq, Jul 2008],catalytic activity:S-adenosyl-L-methionine + histone L-lysine = S-adenosyl-L-homocysteine + histone N(6)-methyl-L-lysine.,caution:This protein was first named MLL2 by PubMed:10637508 and PubMed:10409430. MLL2 corresponds to another protein located on chromosome 12 (see AC O14686).,disease:Often amplified in pancreatic carcinomas.,function:Histone methyltransferase. Methylates 'Lys-4' of histone H3. H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the histone-lysine methyltransferase family. TRX/MLL subfamily.,similarity:Contains 1 CXXC-type zinc finger.,similarity:Contains 1 post-SET domain.,similarity:Contains 1 SET domain.,similarity:Contains 3 A.T hook DNA-binding domains.,similarity:Contains 3 PHD-type zinc fingers.,subunit:Component of the MLL3/MLL4 complex, at least composed of MLL3, MLL4, ASH2L, RBBP5, DPY30, WDR5, NCOA6, KDM6A (or KDM6B), PAXIP1/PTIP and C16orf53/PA1.,tissue specificity:Widely expressed. Highest levels in testis. Also found in brain, bone marrow, heart, muscle, kidney, pancreas, spleen, thymus, prostate, ovary, intestine, colon, peripheral blood lymphocytes, and placenta.,