Human KMT2A peptide (DAG-P0761)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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 RefSeq, Oct 2010]
Specificity	Heart, lung, brain and T- and B-lymphocytes.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the histone-lysine methyltransferase family. TRX/MLL subfamily.Contains 3 A.T hook DNA-binding domains.Contains 1 bromo domain.Contains 1 CXXC-type zinc finger.Contains 1 FY-rich C-terminal domain.Contains 1 FY-rich N-terminal domain.Contains 3
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	KMT2A lysine (K)-specific methyltransferase 2A [Homo sapiens (human)]

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Official Symbol	KMT2A
Synonyms	KMT2A; lysine (K)-specific methyltransferase 2A; HRX; MLL; MLL1; TRX1; ALL-1; CXXC7; HTRX1; MLL1A; WDSTS; MLL/GAS7; TET1-MLL; histone-lysine N-methyltransferase 2A; trithorax-like protein; CDK6/MLL fusion protein; MLL/GAS7 fusion protein; MLL/GMPS fusion protein; zinc finger protein HRX; mixed lineage leukemia 1; lysine N-methyltransferase 2A; MLL-AF4 der(11) fusion protein; CXXC-type zinc finger protein 7; myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila);
Entrez Gene ID	4297
mRNA Refseq	NM_001197104.1
Protein Refseq	NP_001184033.1
UniProt ID	Q03164
Chromosome Location	11q23
Pathway	Lysine degradation, organism-specific biosystem; Lysine degradation, conserved biosystem; Senescence and Autophagy, organism-specific biosystem; Transcriptional misregulation in cancer, organism-specific biosystem; Transcriptional misregulation in cancer, conserved biosystem;
Function	AT DNA binding; chromatin binding; histone acetyl-lysine binding; histone methyltransferase activity (H3-K4 specific); histone methyltransferase activity (H3-K4 specific); identical protein binding; protein binding; protein homodimerization activity; sequ

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