

# Rabbit Anti-KDM4B antibody

# SL12198R

Product Name:	KDM4B
Chinese Name:	组蛋白去甲基化酶JMJD2B抗体
Alias:	JHDM3B; JmjC domain-containing histone demethylation protein 3B; JMJD2B; JmjC domain-containing histone demethylation protein 3A; Jumonji domain containing protein 2B; KIAA0876; Lysine-specific demethylase 4B; KDM4B_HUMAN; KDM4B.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	122kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human JMJD2B/KDM4B:51-150/1096
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	A cluster of genes, BAT1-BAT5, has been localized in the vicinity of the genes for TNF alpha and TNF beta. This gene is found near this cluster; it was mapped near the gene for C2 within a 120-kb region that included a HSP70 gene pair. These genes are all within the human major histocompatibility complex class III region. This gene was thought to be two different genes, NG36 and G9a, adjacent to each other but a recent

publication shows that there is only a single gene. The protein encoded by this gene is thought to be involved in intracellular protein-protein interaction. There are three alternatively spliced transcript variants of this gene but only two are fully described. [provided by RefSeq, Jul 2008]

#### **Function:**

Histone methyltransferase that specifically mono- and dimethylates 'Lys-9' of histone H3 (H3K9me1 and H3K9me2, respectively) in euchromatin. H3K9me represents a specific tag for epigenetic transcriptional repression by recruiting HP1 proteins to methylated histones. Also mediates monomethylation of 'Lys-56' of histone H3 (H3K56me1) in G1 phase, leading to promote interaction between histone H3 and PCNA and regulating DNA replication. Also weakly methylates 'Lys-27' of histone H3 (H3K27me). Also required for DNA methylation, the histone methyltransferase activity is not required for DNA methylation, suggesting that these 2 activities function independently. Probably targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. May also methylate histone H1. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Also methylates CDYL, WIZ, ACIN1, DNMT1, HDAC1, ERCC6, KLF12 and itself.

#### **Subcellular Location:**

Nucleus. Chromosome. Associates with euchromatic regions. Does not associate with heterochromatin.

#### Tissue Specificity:

Expressed in all tissues examined, with high levels in fetal liver, thymus, lymph node, spleen and peripheral blood leukocytes and lower level in bone marrow.

### Post-translational modifications:

Methylated at Lys-185; automethylated.

#### Similarity:

Belongs to the JHDM3 histone demethylase family.

Contains 1 JmjC domain.

Contains 1 JmjN domain.

Contains 2 PHD-type zinc fingers.

Contains 2 Tudor domains.

#### **SWISS:**

094953

#### Gene ID:

23030

#### Database links:

Entrez Gene: 23030 Human

Entrez Gene: 193796 Mouse

Omim: 609765 Human

SwissProt: O94953 Human

SwissProt: Q91VY5 Mouse

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## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.