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KDM6B Rabbit pAb

Catalog # AP97090

Product Information

Application	WB
Primary Accession	O15054
Other Accession	O15054
Reactivity	Rat
Predicted	Pig, Human, Mouse, Rabbit, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	176632
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KDM6B
Epitope Specificity	1471-1570/1643
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SIMILARITY	Belongs to the UTX family. Contains 1 JmjC domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	JMJD3 is a 1,679 amino acid nuclear protein that contains one JmjC domain and belongs to the highly conserved JmjC domain-containing protein family. Functioning as a histone demethylase, JMJD3 uses iron and ascorbate as cofactors to demethylate dimethylated and trimethylated Lys-27 residues of Histone H3, thereby playing an important role in the modification of the histone code. Additionally, JMJD3 regulates posterior development and is involved in the inflammatory response, specifically by mediating macrophage differentiation. JMJD3 is also thought to control the expression of neurogenesis-related proteins and, via this regulatory mechanism, may be necessary for neural commitment during early development. Two isoforms of JMJD3 exist due to alternative splicing events.

Additional Information

Gene ID	23135
Other Names	JMJD3; NEDCFSA; NEDSST; 1700064E03Rik; KDM6B_HUMAN; KDM6B; JmjC domain-containing protein 3; Jumonji domain-containing protein 3; Lysine demethylase 6B; [histone H3]-trimethyl-L-lysine(27) demethylase 6B; 1.14.11.68; KIAA0346; KDM6B_MOUSE; jumonji domain containing 3; jumonji domain containing 3, histone lysine demethylase; lysine (K)-specific demethylase 6B
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	KDM6B
Synonyms	JMJD3, KIAA0346
Function	Histone demethylase that specifically demethylates 'Lys-27' of histone H3, thereby playing a central role in histone code (PubMed:17713478, PubMed:17825402, PubMed:17851529, PubMed:18003914). Demethylates trimethylated and dimethylated H3 'Lys-27' (PubMed:17713478, PubMed:17825402, PubMed:17851529, PubMed:18003914). Plays a central role in regulation of posterior development, by regulating HOX gene expression (PubMed:17851529). Involved in inflammatory response by participating in macrophage differentiation in case of inflammation by regulating gene expression and macrophage differentiation (PubMed:17825402). Plays a demethylase-independent role in chromatin remodeling to regulate T-box family member-dependent gene expression by acting as a link between T-box factors and the SMARCA4- containing SWI/SNF remodeling complex (By similarity).
Cellular Location	Nucleus.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.