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Phospho-JMJD2B(S566) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3754a

Product Information

Application	DB, E
Primary Accession	O94953
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22196
Calculated MW	121897

Additional Information

Gene ID	23030
Other Names	Lysine-specific demethylase 4B, 11411-, JmjC domain-containing histone demethylation protein 3B, Jumonji domain-containing protein 2B, KDM4B, JHDM3B, JMJD2B, KIAA0876
Target/Specificity	This JMJD2B Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S566 of human JMJD2B.
Dilution	DB~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-JMJD2B(S566) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KDM4B
Synonyms	JHDM3B, JMJD2B, KIAA0876
Function	Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a role in histone code. Does not demethylate histone H3

	'Lys-4', H3 'Lys-27', H3 'Lys-36' nor H4 'Lys- 20'. Only able to demethylate trimethylated H3 'Lys-9', with a weaker activity than KDM4A, KDM4C and KDM4D. Demethylation of Lys residue generates formaldehyde and succinate (PubMed:16603238, PubMed:28262558). Plays a critical role in the development of the central nervous system (CNS).
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00537, ECO:0000269|PubMed:15927959}

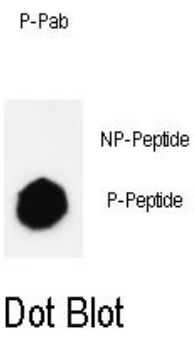
Background

Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a role in histone code. Does not demethylate histone H3 'Lys-4', H3 'Lys-27', H3 'Lys-36' nor H4 'Lys-20'. Only able to demethylate trimethylated H3 'Lys-9', with a weaker activity than KDM4A, KDM4C and KDM4D. Demethylation of Lys residue generates formaldehyde and succinate.

References

Yang, J., et al. Cancer Res. 70(16):6456-6466(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Beyer, S., et al. J. Biol. Chem. 283(52):36542-36552(2008)
Pollard, P.J., et al. Biochem. J. 416(3):387-394(2008)
Katoh, Y., et al. Int. J. Mol. Med. 20(2):269-273(2007)

Images



Dot blot analysis of anti-Phospho-JMJD2B-S566 Phospho-specific Pab (Cat. #AP3754a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.