10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-JMJD2B(S622) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3723a

Product Information

Application	DB, E
Primary Accession	O94953
Other Accession	Q91VY5
Reactivity	Human, Mouse
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22331
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 S622 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(S622) 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}

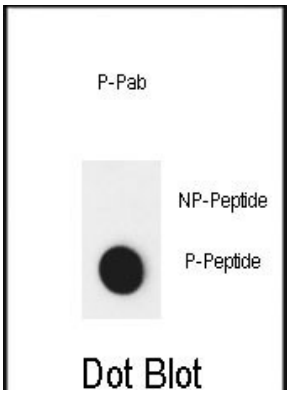
Background

JMJD2B is histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a role in histone code. This protein does not demethylate histone H3 'Lys-4', H3 'Lys-27', H3 'Lys-36' nor H4 'Lys-20'. It is only able to demethylate trimethylated H3 'Lys-9', with a weaker activity than KDM4A, KDM4C and KDM4D. It is demethylation of Lys residue generates formaldehyde and succinate.

References

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-pS622 Phospho-specific Pab (Cat. #AP3723a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.