

Phospho-JMJD2A(Y547) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3726a

Specification

Phospho-JMJD2A(Y547) Antibody - Product Information

Application	DB,E
Primary Accession	O75164
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	120662

Phospho-JMJD2A(Y547) Antibody - Additional Information

Gene ID 9682

Other Names

Lysine-specific demethylase 4A, 11411-, JmjC domain-containing histone demethylation protein 3A, Jumonji domain-containing protein 2A, KDM4A, JHDM3A, JMJD2, JMJD2A, KIAA0677

Target/Specificity

This JMJD2A Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y547 of human JMJD2A.

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-JMJD2A(Y547) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-JMJD2A(Y547) Antibody - Protein Information

Name KDM4A

Synonyms JHDM3A, JMJD2, JMJD2A, KIAA0677

Function Histone demethylase that specifically demethylates 'Lys-9' and 'Lys-36' residues of histone H3, thereby playing a central role in histone code (PubMed:[26741168](#), PubMed:[21768309](#)). Does not demethylate histone H3 'Lys-4', H3 'Lys-27' nor H4 'Lys-20'. Demethylates trimethylated H3 'Lys-9' and H3 'Lys-36' residue, while it has no activity on mono- and dimethylated residues. Demethylation of Lys residue generates formaldehyde and succinate. Participates in transcriptional repression of ASCL2 and E2F-responsive promoters via the recruitment of histone deacetylases and NCOR1, respectively.

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00537, ECO:0000269|PubMed:15927959, ECO:0000269|PubMed:16024779}

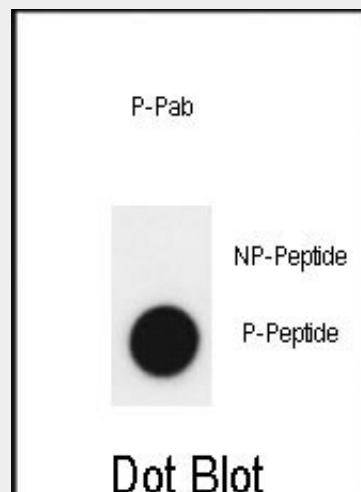
Tissue Location

Ubiquitous..

Phospho-JMJD2A(Y547) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-JMJD2A(Y547) Antibody - Images

Dot blot analysis of anti-Phospho-JMJD2A-Y547 Phospho-specific Pab (Cat. #AP3726a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-JMJD2A(Y547) Antibody - Background

JMJD2A is a member of the Jumonji domain 2 (JMJD2) family and encodes a protein containing a JmjN domain, a JmjC domain, a JD2H domain, two TUDOR domains, and two PHD-type zinc fingers. This nuclear protein functions as a trimethylation-specific demethylase, converting specific

trimethylated histone residues to the dimethylated form, and as a transcriptional repressor.

Phospho-JMJD2A(Y547) Antibody - References

Trojer, P., et al. J. Biol. Chem. 284(13):8395-8405(2009)
Lee, J., et al. Nat. Struct. Mol. Biol. 15(1):109-111(2008)
Katoh, Y., et al. Int. J. Mol. Med. 20(2):269-273(2007)