

#### Phospho-JMJD2A(Y547) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3726a

#### **Specification**

### Phospho-JMJD2A(Y547) Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

DB,E
075164
Human
Rabbit
Polyclonal
Rabbit Ig
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

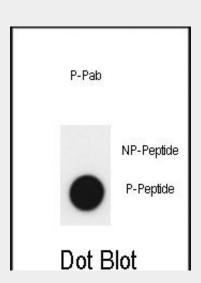
#### **Format**

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**



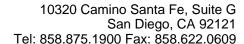
Dot blot analysis of anti-Phospho-JMJD2A-Y547 Phospho-specific Pab (Cat. #AP3726a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

# 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.





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

20(2):269-273(2007)

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: <a href="http://w ww.uniprot.org/citations/26741168" target=" blank">26741168</a>). 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 monoand 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 Cytomety
- Cell Culture