ARG40756
anti-KDM4A / JHDM3A antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes KDM4A / JHDM3A
Tested Reactivity	Ms
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	KDM4A / JHDM3A
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 825-1064 of Human KDM4A (NP_055478.2).
Conjugation	Un-conjugated
Alternate Names	JMJD2; Lysine-specific demethylase 4A; JMJD2A; Jumonji domain-containing protein 2A; JHDM3A; TDRD14A; EC 1.14.11.-; JmjC domain-containing histone demethylation protein 3A

Application Instructions

Application table

Application	Dilution
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Mouse brain
Observed Size	~ 115 kDa

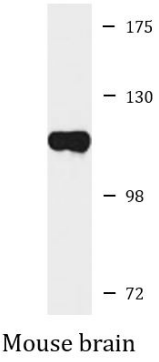
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	KDM4A
Gene Full Name	lysine (K)-specific demethylase 4A
Background	This gene 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. [provided by RefSeq, Apr 2009]
Function	Histone demethylase that specifically demethylates 'Lys-9' and 'Lys-36' residues of histone H3, thereby playing a central role in histone code. 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. Isoform 2: Crucial for muscle differentiation, promotes transcriptional activation of the Myog gene by directing the removal of repressive chromatin marks at its promoter. Lacks the N-terminal demethylase domain. [UniProt]
Highlight	Related products: KDM4A antibodies; Anti-Rabbit IgG secondary antibodies; Related news: Hypoxia-induced transcription, histone demethylases are involved
Calculated Mw	121 kDa
PTM	Ubiquitinated by RNF8 and RNF168 following DNA damage, leading to its degradation. Degradation promotes accessibility of H4K20me2 mark for DNA repair protein TP53BP1, which is then recruited. [UniProt]
Cellular Localization	Nucleus. [UniProt]

Images



ARG40756 anti-KDM4A / JHDM3A antibody WB image

Western blot: 25 µg of Mouse brain lysate stained with ARG40756 anti-KDM4A / JHDM3A antibody at 1:1000 dilution.