

Rabbit KDM4A Polyclonal Antibody | anti-KDM4A antibody

KDM4A Antibody

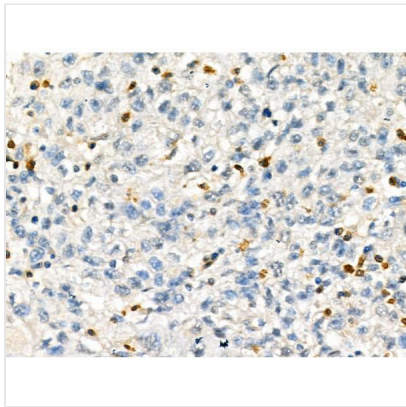
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328952	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Chicken(100%)	ELISA, Western Blot

PRODUCT SYNONYMS

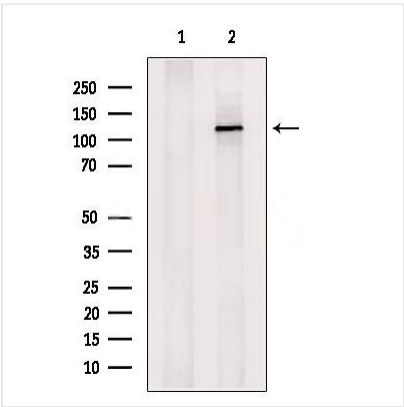
KDM4A; Polyclonal Antibody; KDM4A Antibody; JHDM3A; JmjC domain containing histone demethylation protein 3A; JmjC domain-containing histone demethylation protein 3A; JMJD2; JMJD2A; jumonji C domain containing histone demethylase 3A; Jumonji domain containing 2; Jumonji domain containing 2A; Jumonji domain containing protein 2A; Jumonji domain-containing protein 2A; KDM4A_HUMAN; KIAA0677; Lysine (K) specific demethylase 4A; Lysine-specific demethylase 4A; TDRD14A; Tudor domain containing 14A; anti-KDM4A antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Chicken(100%)
Clonality	Polyclonal
Isotype	IgG
Specificity	KDM4A Antibody detects endogenous levels of total KDM4A.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-KDM4A antibody	ELISA, WB (Western Blot)
Immunogen	A synthesized peptide derived from human KDM4A, corresponding to a region within the internal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA328952 at 1/100 staining Human pancreatic cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of extracts from Rat brain, using KDM4A Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-KDM4A antibody	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). 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. 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.
	Post Translational Modifications: 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.
	Subcellular Location: Nucleus.
	Tissue Specificity: Ubiquitous.
	Subunit Structure: Interacts with histone deacetylase proteins HDAC1, HDAC2 and HDAC3. Interacts with RB and NCOR1.(Microbial infection) Interacts with HTLV-1 Tax protein.
Similarity: The 2 Tudor domains recognize and bind methylated histone H3 'Lys-4' residue (H3K4me). Double Tudor domain has an interdigitated structure and the unusual fold is required for its ability to bind methylated histone tails. Trimethylated H3 'Lys-4' (H3K4me3) is bound in a cage of 3 aromatic residues, 2 of which are from the Tudor domain 2, while the binding specificity is determined by side-chain interactions involving residues from the Tudor domain 1. The Tudor domains are also able to bind trimethylated histone H3 'Lys-9' (H3K9me3), di- and trimethylated H4 'Lys-20' (H4K20me2 and H4K20me3). Has high affinity for H4K20me2, blocking recruitment of proteins such as TP53BP1. Belongs to the JHDM3 histone demethylase family.	

NCBI AND UNIPROT INFORMATION

NCBI GI #	55665236
NCBI GeneID	9682
UniProt Accession #	O75164
Molecular Weight	Observed Molecular Weight: (Observed)120kD. Predicted Molecular Weight: (Calculated)121kDa.
NCBI Official Synonym Full Names	lysine demethylase 4A

NCBI Official Symbol	KDM4A
NCBI Official Synonym Symbols	JMJD2; JHDM3A; JMJD2A; TDRD14A
NCBI Protein Information	lysine-specific demethylase 4A
UniProt Protein Name	Lysine-specific demethylase 4A
UniProt Gene Name	KDM4A
UniProt Synonym Gene Names	JHDM3A; JMJD2; JMJD2A; KIAA0677
UniProt Entry Name	KDM4A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/kdm4a-antibody-western-blot-elisa/328952>