

Active Recombinant Human KDM3A, FLAG-tagged

Cat. No. KDM3A-48H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human KDM3A (accession number NP_001140160.1) was expressed in Sf9 cells and contains an N-terminal FLAG tag with an observed molecular weight of 151.6 kDa.
Species	Human
Source	Sf9 Cells
Description	KDM3A (lysine (K)-specific demethylase 3A), also known as JMJD1A (Jumonji Domain Containing 1A) is a histone demethylase that preferentially demethylates mono- and dimethylated lysine 9 of histone H3, with a preference for the dimethylated residue. KDM3A has little or no activity on trimethylated lysine 9. KDM3A is involved in hormone-dependent transcriptional activation by participating in the recruitment to androgen-receptor target genes resulting in H3 lysine 9 demethylation and transcriptional activation. KDM3A is also involved in spermatogenesis where it regulates expression of target genes such as PRM1 and TMP1 which are required for packaging and condensation of sperm chromatin. KDM3A contributes to obesity resistance through its regulation of metabolic genes such as PPARα and UCP1.
Form	25 mM HEPES, pH 7.5, 150 mM NaCl and 5% glycerol.
Bio-activity	H3K9me2 demethylase.
Applications	Enzyme kinetics, inhibitor screening, and selectivity profiling.

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Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage.
Concentration	1 mg/ml
GENE INFORMATION	
Gene Name	KDM3A lysine (K)-specific demethylase 3A [Homo sapiens]
Official Symbol	KDM3A
Synonyms	KDM3A; lysine (K)-specific demethylase 3A; JMJD1, JMJD1A, jumonji domain containing 1 , jumonji domain containing 1A; lysine-specific demethylase 3A; JHMD2A; jumonji C domain containing histone demethylase 2A; KIAA0742; TSGA; testis-specific protein A; jumonji domain containing 1; jumonji domain containing 1A; jumonji domain-containing protein 1A; jumonji C domain-containing histone demethylase 2A; jmjC domain-containing histone demethylation protein 2A; JMJD1; JHDM2A; JMJD1A; DKFZp686A24246; DKFZp686P07111;
Gene ID	55818
mRNA Refseq	NM_001146688
Protein Refseq	NP_001140160
MIM	611512
UniProt ID	Q9Y4C1
Chromosome	2p11.2

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Location	
Pathway	Coregulation of Androgen receptor activity, organism-specific biosystem;
Function	androgen receptor binding; iron ion binding; metal ion binding; oxidoreductase activity; oxidoreductase activity, acting on single donors with incorporation of molecular oxygen, incorporation of two atoms of oxygen;

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