Recombinant Human KDM4A, GST-tagged

Cat. No. KDM4A-168H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human JMJD2A Tudor Domains (888-1023 aa) fused to a GST tag at the N-terminus
Species	Human
Source	E.coli
ProteinLength	888-1023 a.a.
Description	Tudor domains are small protein structural motifs of about ~50 amino acids related to the “royal family” of methyl readers, which also includes chromo, MBT, PWWP, and Agenet-like domains. Tudor domains occur either alone, in tandem, or with other domains and are found in many proteins that are involved in RNA metabolism, germ cell development, transposon silencing, DNA damage response, histone modification, and chromatin remodeling. The tudor domains recognize symmetric methylated arginine or methylated lysine residues. JMJD2A catalyzes the demethylation of trimethylated histone H3 at lysine residues 9 and 36 (H3K9me3 and H3K36me3). However, the tudor domain of this protein has been shown to bind histone H3K4me, H3K9me3, and H3K20me2/3. Like other JmjC protein hydroxylase family members, JMJD2A is an α-ketoglutarate-dependent Fe (II) oxygenase. This product contains the tandem tudor domains of JMJD2A.
Form	Liquid. 50 mM Tris-HCl, pH 8.0, 150 mM sodium chloride, and 20% glycerol.
Molecular Mass	42.2 kDa (888-1023 aa, NT GST Tag)

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Purity	≥90%
Storage	Store at -80°C. Avoid repeated freeze and thaw cycles. Stable for ≥6 months

GENE INFORMATION

Gene Name	KDM4A lysine (K)-specific demethylase 4A [Homo sapiens]
Official Symbol	KDM4A
Synonyms	KDM4A; lysine (K)-specific demethylase 4A; JMJD2, JMJD2A, jumonji domain containing 2 , jumonji domain containing 2A; lysine-specific demethylase 4A; JHDM3A; jumonji C domain containing histone demethylase 3A; KIAA0677; jumonji domain containing 2; jumonji domain containing 2A; jumonji domain-containing protein 2A; jumonji C domain-containing histone demethylase 3A; jmjC domain-containing histone demethylation protein 3A; JMJD2; JMJD2A;
Gene ID	9682
mRNA Refseq	NM_014663
Protein Refseq	NP_055478
MIM	609764
UniProt ID	O75164
Chromosome Location	1p34.1
Function	histone demethylase activity (H3-K36 specific); metal ion binding; oxidoreductase

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	activity; oxidoreductase activity, acting on single donors with incorporation of molecular oxygen, incorporation of two atoms of oxygen; protein binding; zinc ion binding;

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