

## Active Recombinant Human KDM1A, FLAG-tagged

**Cat. No.** KDM1A-53H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| <b>Product Overview</b> | Recombinant Human KDM1A (accession number NP_055828) was expressed in Sf9 cells and contains an N-terminal FLAG tag with a molecular weight of 97.1 kDa.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Source</b>           | Sf9 Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Description</b>      | LSD1 (Lysine-specific demethylase 1, also designated KDM1A) was identified as a subunit of different complexes (such as CTBP, CoREST, NuRD or BRAF35). LSD1 is involved in transcriptional repression of genes through the demethylation of Histone H3 monomethyl Lys4 and Histone H3 dimethyl Lys4, a methylation site associated with transcriptional activation. LSD1 is also involved in transcriptional activation through the demethylation of Histone H3 monomethyl Lys9 and Histone H3 dimethyl Lys9, a modification often associated with transcriptional repression. LSD1 is also able to demethylate Lys370me1 and Lys370me2 in the regulatory domain of the tumor suppressor p53. LSD1 is a flavin-dependent amine oxidase. |
| <b>Form</b>             | 20 mM Tris-HCl pH 7.4, 150 mM NaCl and 20% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Bio-activity</b>     | H3K4me2 and H3K4me1 demethylase.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Applications</b>     | Enzyme kinetics, inhibitor screening, and selectivity profiling.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Storage</b>          | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

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when not in storage.

**Concentration** 0.77 mg/ml

## GENE INFORMATION

**Gene Name** KDM1A lysine (K)-specific demethylase 1A [ Homo sapiens ]

**Official Symbol** KDM1A

**Synonyms**

KDM1A; lysine (K)-specific demethylase 1A; amine oxidase (flavin containing) domain 2 , AOF2, KDM1, lysine (K) specific demethylase 1; lysine-specific histone demethylase 1A; BHC110; KIAA0601; LSD1; lysine (K)-specific demethylase 1; BRAF35-HDAC complex protein BHC110; lysine-specific histone demethylase 1; amine oxidase (flavin containing) domain 2; FAD-binding protein BRAF35-HDAC complex, 110 kDa subunit; flavin-containing amine oxidase domain-containing protein 2; AOF2; KDM1;

**Gene ID** 23028

**mRNA Refseq** NM\_001009999

**Protein Refseq** NP\_001009999

**MIM** 609132

**UniProt ID** O60341

**Chromosome Location** 1p36.12

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| <b>Pathway</b>  | Coregulation of Androgen receptor activity, organism-specific biosystem; Factors involved in megakaryocyte development and platelet production, organism-specific biosystem; Hemostasis, organism-specific biosystem; Notch signaling pathway, organism-specific biosystem; Notch-mediated HES/HEY network, organism-specific biosystem;                                                                                                                                                                                          |
| <b>Function</b> | MRF binding; androgen receptor binding; chromatin binding; demethylase activity; enzyme binding; flavin adenine dinucleotide binding; histone demethylase activity; histone demethylase activity (H3-K4 specific); histone demethylase activity (H3-K9 specific); histone demethylase activity (H3-dimethyl-K4 specific); ligand-dependent nuclear receptor transcription coactivator activity; oxidoreductase activity; p53 binding; protein binding; transcription factor binding; transcription regulatory region DNA binding; |