

Recombinant LSD1 / KDM1A protein

Catalog No: 31426, 31826

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.45 µg/µl

Source: Human

Buffer Contents: Full length recombinant KDM1A / LSD1 protein was expressed in Sf9 cells and is supplied in 25 mM Hepes pH 7.5, 300 mM NaCl, 10% Glycerol, 0.04% Triton X-100, and 0.5 mM TCEP.

Background: **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.

Protein Details: Recombinant LSD1 / KDM1A (accession number NP_055828) was expressed in Sf9 cells and contains an N-terminal FLAG-Tag with an observed molecular weight of 110 kDa. The recombinant protein is >90% pure by SDS-PAGE.

Application Notes: Recombinant LSD1 / KDM1A is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

MALDI-TOF for LSD1 / KDM1A protein activity

3 µM H3K4me2 (1-27aa) peptide was incubated with 5 nM and 15 nM of LSD1 / KDM1A protein in reaction buffer containing 50 mM Tris-HCl pH 8.0, 50 nM FAD for 1 hr at room temperature. Single H3K4me2 peptide was used as negative control. MALDI-TOF was used for detection.

References: This protein is described in the following references:

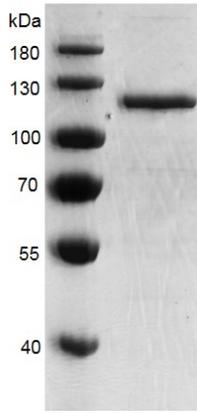
Lan F *et al.* (2007) Nature 448:718-722

Forneris F *et al.* (2007) J Biol Chem. 281:35289-35295

Storage and Guarantee: 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. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

LSD1 / KDM1A

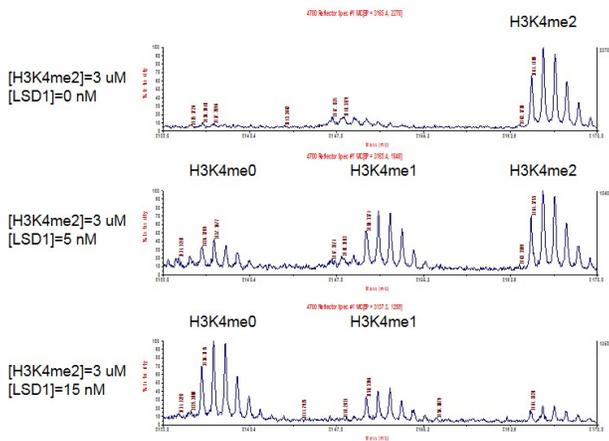


Recombinant LSD1 / KDM1A protein gel.

LSD1 / KDM1A protein was run on a 8% SDS-PAGE gel and stained with Coomassie blue.

MW: 110 kDa

Purity: > 91%



MALDI-TOF for LSD1 / KDM1A protein activity

3 μ M H3K4me2 (1-27aa) peptide was incubated with 5 nM and 15 nM of LSD1 / KDM1A protein in reaction buffer containing 50 mM Tris-HCl pH 8.0, 50 nM FAD for 1 hr at room temperature. Single H3K4me2 peptide was used as negative control. MALDI-TOF was used for detection.