Human KDM1 / LSD1 Protein (His & GST Tag)

Catalog Number: **13721-H20B1**

General Information

Gene Name Synonym:

AOF2; BHC110; KDM1; LSD1

Protein Construction:

A DNA sequence encoding the human KDM1 (O60341-1) (Ser172-Met852) was fused with the N-terminal poly histidine-tagged GST tag at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human KDM1 /GST chimera consists of 917 amino acids and has a calculated molecular mass of 103.3 kDa. The recombinant protein migrates as an approximately 93 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, 2mM DTT, pH 8.0, 10% gly

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

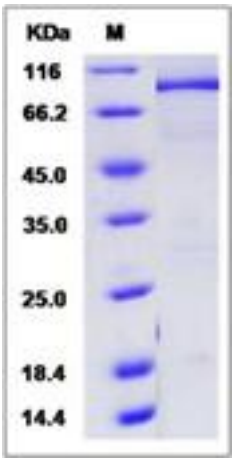
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

LSD1 belongs to the flavin monoamine oxidase family. It contains 1 SWIRM domain and is a component of a RCOR/GFI/LSD1/HDAC complex. LSD1 interacts directly with GFI1 and GFI1B. LSD1 speficially removes histone H3K4me2 to H3K4me1 or H3K4me0 through a FAD-dependent oxidative reaction. When forming a complex with androgen receptor (and possibly other nuclear hormone receptors), LSD1 changes its substrates to H3K9me2. Thus LSD1 is considered to act as a coactivator or a corepressor. It may play a role in the repression of neuronal genes. Alone, LSD1 is unable to demethylate H3 'Lys-4' on nucleosomes and requires the presence of RCOR1/CoREST to achieve such activity.

References

1.Kusaba M, *et al.* (2007) Rice NON-YELLOW COLORING1 is involved in light-harvesting complex II and grana degradation during leaf senescence. Plant Cell. 19(4):1362-75. 2.Pazour GJ, *et al.* (2005) Proteomic analysis of a eukaryotic cilium. J Cell Biol. 170(1):103-13. 3.Merchant SS, *et al.* (2007) The Chlamydomonas genome reveals the evolution of key animal and plant functions. Science. 318(5848):245-50.