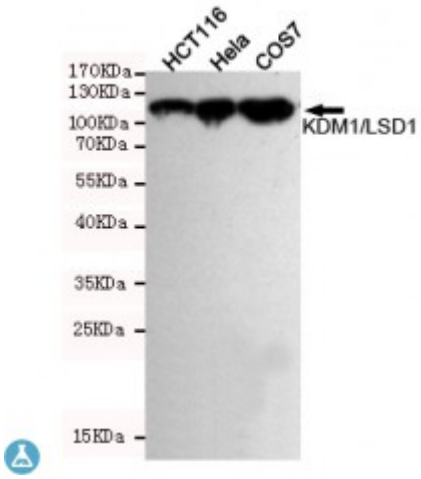
Anti-KDM1/LSD1 antibody



Description	Mouse monoclonal to KDM1/LSD1.

Model	STJ99025
Host	Mouse
Reactivity	Human, Simian
Applications	ELISA, WB
Immunogen	Purified recombinant human KDM1/LSD1 protein fragments expressed in E.coli.
Gene ID	23028
Gene Symbol	KDM1A
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of KDM1/LSD1 and does not cross-react with related proteins.
Tissue Specificity	Ubiquitously expressed.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clone ID	1E5-H2
Note	For Research Use Only (RUO).
Protein Name	Lysine-specific histone demethylase 1A BRAF35-HDAC complex protein BHC110 Flavin-containing amine oxidase domain-containing protein 2
Molecular Weight	110kDa

Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:29079OMIM:609132
Alternative Names	Lysine-specific histone demethylase 1A BRAF35-HDAC complex protein BHC110 Flavin-containing amine oxidase domain-containing protein 2
Function	Histone demethylase that demethylates both 'Lys-4' (H3K4me) and 'Lys-9' (H3K9me) of histone H3, thereby acting as a coactivator or a corepressor, depending on the context. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. Acts as a corepressor by mediating demethylation of H3K4me, a specific tag for epigenetic transcriptional activation. Demethylates both mono- (H3K4me1) and di-methylated (H3K4me2) H3K4me. May play a role in the repression of neuronal genes. Alone, it is unable to demethylate H3K4me on nucleosomes and requires the presence of RCOR1/CoREST to achieve such activity. Also acts as a coactivator of androgen receptor (ANDR)-dependent transcription, by being recruited to ANDR target genes and mediating demethylation of H3K9me, a specific tag for epigenetic transcriptional repression. The presence of PRKCB in ANDR-containing complexes, which mediates phosphorylation of 'Thr-6' of histone H3 (H3T6ph), a specific tag that prevents demethylation H3K4me, prevents H3K4me demethylase activity of KDM1A. Demethylates di-methylated 'Lys-370' of p53/TP53 which prevents interaction of p53/TP53 with TP53BP1 and represses p53/TP53-mediated transcriptional activation. Demethylates and stabilizes the DNA methylase DNMT1. Required for gastrulation during embryogenesis. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development. Effector of SNAI1-mediated transcription repression of E-cadherin/CDH1, CDN7 and KRT8. Required for the maintenance of the silenced state of the SNAI1 target genes E-cadherin/CDH1 and CDN7.
Sequence and Domain Family	The SWIRM domain may act as an anchor site for a histone tail.
Cellular Localization	Nucleus
Post-translational Modifications	Polyubiquitinated by JADE2; which leads to its proteasomal degradation.