

Product datasheet for **TA384594**

KDM1A Rabbit Monoclonal Antibody [Clone ID: R08-3J5]

Product data:

Product Type:	Primary Antibodies
Clone Name:	R08-3J5
Applications:	IF, IP, WB
Recommended Dilution:	WB: 1/2000-1/10000 ICC/IF: 1/20-1/100 IP: 1/20-1/50
Reactivity:	Human, Hamster, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide of human KDM1/LSD1
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 93 kDa; Observed MW: 110 kDa
Gene Name:	lysine demethylase 1A
Database Link:	Entrez Gene 23028 Human O60341



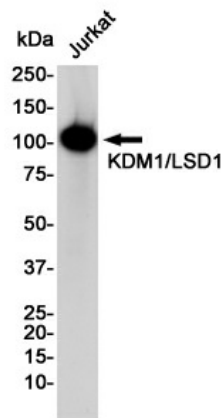
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Background:

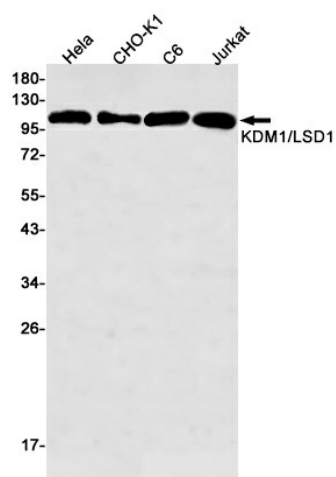
Swiss-Prot Acc.O60341.Histone demethylase that demethylates both 'Lys-4' (H3K4me) and 'Lys-9' (H3K9me) of histone H3, thereby acting as a coactivator or a corepressor, depending on the context. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. 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.

Synonyms:

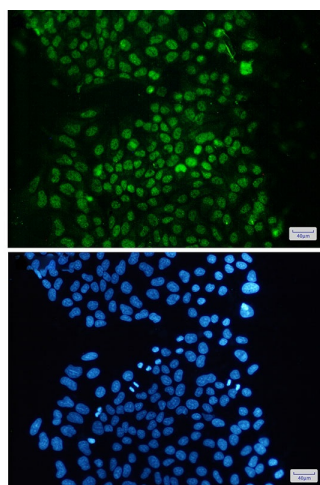
AOF2; BHC110; KDM1; LSD1

Product images:

Western blot analysis of KDM1/LSD1 in Jurkat lysates using KDM1A antibody.



Western blot analysis of KDM1/LSD1 in HeLa, CHO-K1, C6, Jurkat lysates using KDM1/LSD1 antibody.



Immunocytochemistry analysis of KDM1/LSD1 (green) in HeLa using KDM1/LSD1 antibody, and DAPI (blue)