abcam

Product datasheet

KDM1/LSD1 Activity Quantification Assay Kit (Colorimetric) ab113459

<u>2 References</u> 画像数 2

製品の概要

製品名	KDM1/LSD1 Activity Quantification Assay Kit (Colorimetric)
検出方法	Colorimetric
アッセイタイプ	Enzyme activity
全工程の試験時間	3h 00m
種交差性	交差種: Mouse, Human, Plants
	交差が予測される動物種: Mammals, Other species 🛛 🔺
製品の概要	KMD1/LSD1 (Lysine Specific Histone Demethylase 1) is a histone demethylase that only acts on mono- or di-methylated lysines. KDM1/LSD1 acts as a co-repressor by mediating demethylation of H3(meK4), a specific tag for epigenetic transcriptional activation.
	KDM1/LSD1 Activity Quantification Assay Kit (Colorimetric) (ab113459) is designed for the easy and fast colorimetric measurement of KDM1/LSD1 activity or inhibition. The antibody-based, immunospecific method directly detects KDM1/LSD1-converted demethylated products, rather than by-products, in a 96 stripwell microplate format.
	This kit may cross react with LSD2.
試験プラットフォーム	Microplate reader

製品の特性

保存方法 Please refer to protocols.

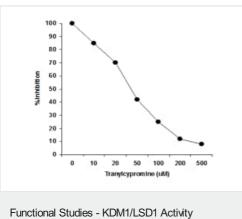
内容	48 tests	96 tests
10X Wash Buffer	1 x 14ml	1 x 28ml
8-Well Assay Strips (with Frame)	6 units	12 units
Adhesive Covering Film	1 unit	1 unit
Capture Antibody, 1000 μg/mL	1 x 5µl	1 x 10µl

内容	48 tests	96 tests
Detection Antibody, 400 µg/mL	1 x 6µl	1 x 12µl
Developer Solution	1 x 5ml	1 x 10ml
LSD1 Assay Buffer	1 x 4ml	1 x 8ml
LSD1 Assay Standard, 50 µg/mL	1 x 10µl	1 x 20µl
LSD1 Inhibitor Tranylcypromine, 1 mM	1 x 20µl	1 x 40µl
LSD1 Substrate, 50 µg/mL	1 x 60µl	1 x 120µl
Stop Solution	1 x 5ml	1 x 10ml

関連性

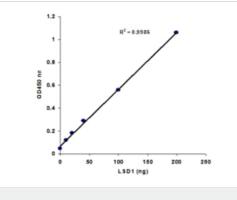
Histone demethylase that demethylates both 'Lys-4' (H3K4me) and 'Lys-9' (H3K9me) of histone H3, thereby acting as a coactivator or a corepressor, depending on the context. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. Acts as a corepressor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





Demonstration of inhibitory effects of an KDM1/LSD1 inhibitor detected by ab113459. [LSD1 concentration: 200 ng/well]

Functional Studies - KDM1/LSD1 Activity Quantification Assay Kit (Colorimetric) (ab113459)



Demonstration of high sensitivity of KDM1 / LSD1 activity assay achieved by using recombinant KDM1 / LSD1 with ab113459.

Functional Studies - KDM1/LSD1 Activity Quantification Assay Kit (Colorimetric) (ab113459)

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