abcam

Product datasheet

Recombinant Human KDM4A / JHDM3A / JMJD2A protein ab125541

1 图像

描述

产品名称 重组人KDM4A / JHDM3A / JMJD2A蛋白

纯**度** > 90 % Densitometry.

Purity was determined to be >90% by densitometry. Affinity purified.

表达系统 Baculovirus infected Sf9 cells

Accession <u>O75164</u>

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

种属 Human

预**测分子量** 150 kDa including tags

氨基酸 1 to 886

标签 GST tag N-Terminus

技术指标

Our <u>Abpromise guarantee</u> covers the use of ab125541 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用 Western blot

SDS-PAGE

形式 Liquid

制备和贮存

稳定性和存储 Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.31% Glutathione, 0.002% PMSF, 0.004% DTT, 0.79% Tris HCI, 0.003% EDTA,

25% Glycerol (glycerin, glycerine), 0.88% Sodium chloride

功能

Histone demethylase that specifically demethylates 'Lys-9' and 'Lys-36' residues of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-4', H3 'Lys-27' nor H4 'Lys-20'. Demethylates trimethylated H3 'Lys-9' and H3 'Lys-36' residue, while it has no activity on mono- and dimethylated residues. Demethylation of Lys residue generates formaldehyde and succinate. Participates in transcriptional repression of ASCL2 and E2F-responsive promoters via the recruitment of histone deacetylases and NCOR1, respectively. Isoform 2: Crucial for muscle differentiation, promotes transcriptional activation of the Myog gene by directing the removal of repressive chromatin marks at its promoter. Lacks the N-terminal demethylase domain.

组织特异性

Ubiquitous.

序列相似性

Belongs to the JHDM3 histone demethylase family.

Contains 1 C2HC pre-PHD-type zinc finger.

Contains 1 JmjC domain. Contains 1 JmjN domain.

Contains 2 PHD-type zinc fingers.

Contains 2 Tudor domains.

结**构域**

The 2 Tudor domains recognize and bind methylated histone H3 'Lys-4' residue (H3K4me). Double Tudor domain has an interdigitated structure and the unusual fold is required for its ability to bind methylated histone tails. Trimethylated H3 'Lys-4' (H3K4me3) is bound in a cage of 3 aromatic residues, 2 of which are from the Tudor domain 2, while the binding specificity is determined by side-chain interactions involving residues from the Tudor domain 1. The Tudor domains are also able to bind trimethylated histone H3 'Lys-9' (H3K9me3), di- and trimethylated H4 'Lys-20' (H4K20me2 and H4K20me3). Has high affinity for H4K20me2, blocking recruitment of proteins such as TP53BP1.

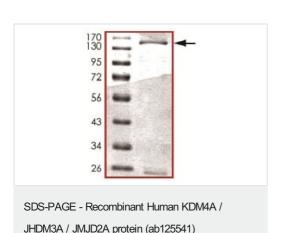
翻译后修饰

Ubiquitinated by RNF8 and RNF168 following DNA damage, leading to its degradation. Degradation promotes accessibility of H4K20me2 mark for DNA repair protein TP53BP1, which is then recruited.

细胞定位

Nucleus.

图片



SDS-PAGE analysis of ab125541.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors