

Product datasheet

Recombinant human KDM5A / Jarid1A / RBBP2 protein ab198108

[2 Images](#)

Description

| | |
|----------------------------|---|
| Product name | Recombinant human KDM5A / Jarid1A / RBBP2 protein |
| Biological activity | <p>Specific Activity: 0.027 pmole/min/μg</p> <p>Assay Conditions: 10 μl reaction mix containing assay buffer with 20 mM Tris (pH 7.4), 50 mM NaCl 500 μM α-ketoglutarate, 25 μM iron, 2 mM ascorbic acid, 0.01% Tween-20, 0.5 μM biotinylated peptide substrate, and ab198108 (80 – 400 ng) added to the wells. Add antibody against demethylated K4 peptide. Incubate for 30 min, then Streptavidin-conjugated secondary antibody followed by Alpha Screening detection.</p> |
| Purity | <p>>= 70 % SDS-PAGE.</p> <p>Affinity purified.</p> |
| Expression system | Baculovirus infected Sf9 cells |
| Accession | <u>P29375</u> |
| Protein length | Protein fragment |
| Animal free | No |
| Nature | Recombinant |
| Species | Human |
| Sequence | <p>MAGVGPGGYAAEFVPPPECPVFEPSWEEFTDPLSFIGRI</p> <p>RPLAEKTGICK</p> <p>IRPPKDWQPPFACEVKSFRFTPRVQRLNELEAMTRVRLD</p> <p>FLDQLAKFWEL</p> <p>QGSTLKIPVVERKILDLYALSKIVASKGGFEMVTKEKKWSK</p> <p>VGSRLGYLP</p> <p>GKGTGSLLKSHYERILYPYELFQSGVSLMGVQMPNLDLKE</p> <p>KVEPEVLSTD</p> <p>TQTSPEPGTRMNLPKRTRRVKTQSESGDVS RNTELKKLQI</p> <p>FGAGPKVVG</p> <p>LAMGTKDKEDEVTRRRKVTNRSDAFNMQMRQRKGTL SV</p> <p>NFVDLYVCMFCG</p> <p>RGNNEDKLLLCDGCDSDSYHTFCLIPPLPDVPKGDWRCPK</p> <p>CVAEECSKPRE</p> <p>AFGFEQAVREYTLQSFGEADNFKSDYFNMPVHMPVTEL</p> <p>VEKEFWRLVSS</p> <p>IEEDVVEYGADISSKDFGSGFPVKDGRRKILPEEEYALS</p> |

GWNLNNMPV
 LEQSVLAHINVDISGMKVPWLYVGMCFSSFCWHIEDHWS
 YSINYLHWGEP
 KTWYGVPSHAAEQLEEVMMRELAPELFESQPDLLHQLVTI
 MNPVNLMEHGV
 PVYRTNQCAGEFVVTFPRAYHSGFNQGYNFAEAVNFCTA
 DWLPIGRQCVN
 HYRRLRRHCVFSHEELIFKMAADPECLDVGLAAMVCKEL
 TLMTEETRLR
 ESVVQMGVLMSEEEVFELVPDDERQCSACRTTCFLSALT
 CSCNPERLVCL
 YHPTDLCPCPMQKKCLRYRYPLEDLPSLLYGVKVRAQSY
 DTWVSRVTEAL
 SANFNHKKDLIELRVMLEDAEDRKYPENDLFRKLRLDAVKE
 AETCASVAQL
 LLSKKQKHRQSPDSGRTRTKLTVEELKAFVQQLFSLPCVI
 SQARQVKNLL
 DDVEEFHERAQEAMMDETPDSSKLQMLIDMGSSLYVELP
 ELPRLKQELQQ
 ARWLDEVRLTLSDPQQVTLDMKKLIDSGVGLAPHHAVE
 KAMAEQELLT
 VSERWEEKAKVCLQARPRHSVASLESVMNEAKNIPAFLPN
 VLSLKEALQK
 AREWTAKVEAIQSGSNYAYLEQLESLSAKGRPIPVRLAL
 PQVESQVAAA
 RAWRERTGRTFLKKNSSHTLLQVLSPRTDIGVYGSGKNRR

| | |
|--|------------------------|
| Predicted molecular weight | 125 kDa including tags |
| Amino acids | 1 to 1090 |
| Tags | DDDDK tag C-Terminus |
| Additional sequence information | NM_001042603. |

Specifications

Our **Abpromise guarantee** covers the use of **ab198108** in the following tested applications.

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

| | |
|---------------------|--------------------|
| Applications | Functional Studies |
| | SDS-PAGE |
| Form | Liquid |

Preparation and Storage

| | |
|------------------------------|--|
| Stability and Storage | <p>Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.</p> <p>pH: 8.00</p> <p>Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 20% Glycerol (glycerin, glycerine), 0.05% (R*,R*)-1,4-Dimercaptobutan-2,3-diol</p> <p>80 µg/ml DDDDK peptide</p> <p>This product is an active protein and may elicit a biological response in vivo, handle with caution.</p> |
|------------------------------|--|

General Info

Function

Histone demethylase that specifically demethylates 'Lys-4' of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-9', H3 'Lys-27', H3 'Lys-36', H3 'Lys-79' or H4 'Lys-20'. Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-4'. May stimulate transcription mediated by nuclear receptors. May be involved in transcriptional regulation of Hox proteins during cell differentiation. May participate in transcriptional repression of cytokines such as CXCL12.

Sequence similarities

Belongs to the JARID1 histone demethylase family.
Contains 1 ARID domain.
Contains 1 JmjC domain.
Contains 1 JmjN domain.
Contains 3 PHD-type zinc fingers.

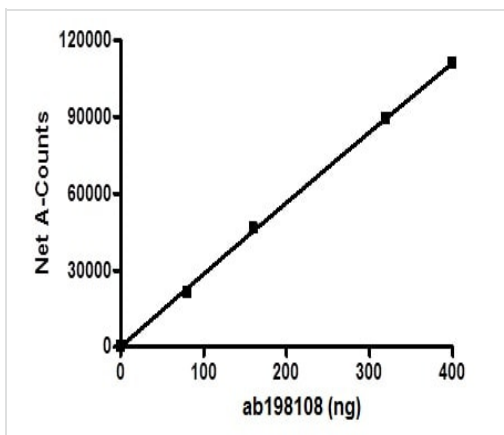
Domain

The GSGFP motif is required for the interaction with SUZ12.

Cellular localization

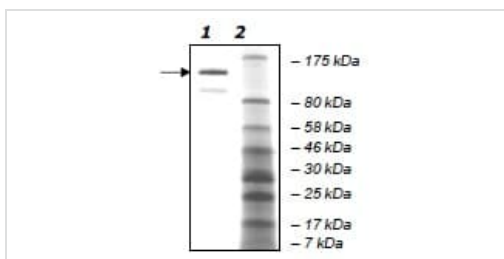
Nucleus > nucleolus. Occupies promoters of genes involved in RNA metabolism and mitochondrial function.

Images



Specific activity assay of ab198108.

Functional Studies - Recombinant human KDM5A / Jarid1A / RBBP2 protein (ab198108)



4-20% SDS-PAGE analysis of ab198108.

Lane 1: 2.1 µg ab198108

Lane 2: Protein marker

SDS-PAGE - Recombinant human KDM5A / Jarid1A / RBBP2 protein (ab198108)

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

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