# abcam

### Product datasheet

# Recombinant human KDM4D / JMJD2D protein ab196398

## 2 Images

#### **Description**

Product name Recombinant human KDM4D / JMJD2D protein

**Biological activity** Specific Activity: 0.017 pmole/min/μg

Assay Conditions: 10 $\mu$ I reaction mix containing assay buffer with 20 mM HEPES (pH 7.4), 150 mM NaCl, 500  $\mu$ M  $\alpha$ -ketoglutarate, 25  $\mu$ M iron, 2mM ascorbic acid, 0.01% Tween-20, 0.5  $\mu$ M biotinylated peptide substrate, and ab196398 (100 – 400 ng) added to the wells. Add antibody against demethylated K9 peptide. Incubate for 30 min, then Streptavidin-conjugated secondary

antibody followed by detection.

Purity > 90 % SDS-PAGE.

Expression system Baculovirus infected Sf9 cells

Accession Q6B0l6

Protein length Protein fragment

Animal free No

**Nature** Recombinant

**Species** Human

Sequence ETMKSKANCAQNPNCNIMIFHPTKEEFNDFDKYIAYMESQ

**GAHRAGLAKI** 

IPPKEWKARETYDNISEILIATPLQQVASGRAGVFTQYHKKK

**KAMTVGEY** 

RHLANSKKYQTPPHQNFEDLERKYWKNRIYNSPIYGADISG

SLFDENTKQ

 ${\tt WNLGHLGTIQDLLEKECGVVIEGVNTPYLYFGMWKTTFAW}$ 

**HTEDMDLYSI** 

NYLHLGEPKTWYVVPPEHGQRLERLARELFPGSSRGCGA

**FLRHKVALISP** 

TVLKENGIPFNRITQEAGEFMVTFPYGYHAGFNHGFNCAE

**AINFATPRWI** 

DYGKMASQCSCGEARVTFSMDAFVRILQPERYDLWKRG

QDRAVVDHMEPR VPA

Predicted molecular weight 67 kDa including tags

1

Amino acids 2 to 354

Tags GST tag N-Terminus

#### **Specifications**

Our Abpromise guarantee covers the use of ab196398 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

Additional notes Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

#### **Preparation and Storage**

**Stability and Storage** Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.63% Tris HCI, 0.64% Sodium chloride, 0.02% Potassium chloride, 0.12%

Glutathione, 20% Glycerol, 0.05% DTT

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### **General Info**

**Function** Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a central

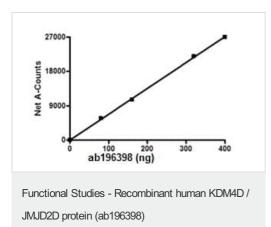
role in histone code. Does not demethylate histone H3 'Lys-4', H3 'Lys-27', H3 'Lys-36' nor H4 'Lys-20'. Demethylates both di- and trimethylated H3 'Lys-9' residue, while it has no activity on monomethylated residues. Demethylation of Lys residue generates formaldehyde and succinate.

**Sequence similarities**Belongs to the JHDM3 histone demethylase family.

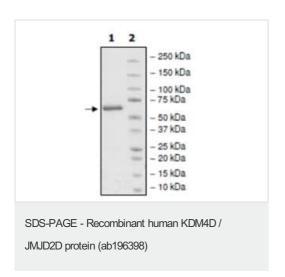
Contains 1 JmjC domain. Contains 1 JmjN domain.

Cellular localization Nucleus.

#### **Images**



Example of specific activity of ab196398.



4-20% SDS-Page analysis of ab196398 (2.5  $\mu$ g) with Coomassie staining.

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

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