

JMJD4 (C-13): sc-131572

BACKGROUND

A crucial regulator of chromatin dynamics and DNA transcription is the covalent modification and methylation of histones. Generally, methylation of certain lysine residues on Histone H3 and Histone H4 can be associated with transcriptionally active or inactive chromatin. This regulation has profound effects on the expression of genes and is part of an epigenetic memory network that determines cell fate. JMJD4 (jumonji domain-containing protein 4) is a member of a family of JMJC domain-containing histone demethylases that are directly involved in removing methyl residues from distinct and unique lysine residues. These actions are implicated in gene expression and the regulation of cell senescence. JMJC domain-containing histone demethylases are also likely involved in development via their ability to regulate gene expression.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: JMJD4 (human) mapping to 1q42.13; Jmjd4 (mouse) mapping to 11 B1.3.

SOURCE

JMJD4 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of JMJD4 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131572 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JMJD4 (C-13) is recommended for detection of JMJD4 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other JMJD family members.

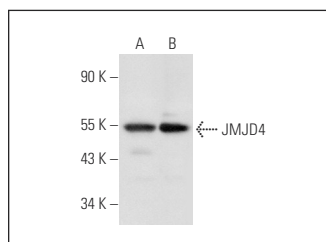
JMJD4 (C-13) is also recommended for detection of JMJD4 isoforms 1 and 2 in additional species, including equine.

Suitable for use as control antibody for JMJD4 siRNA (h): sc-88226, JMJD4 siRNA (m): sc-146327, JMJD4 shRNA Plasmid (h): sc-88226-SH, JMJD4 shRNA Plasmid (m): sc-146327-SH, JMJD4 shRNA (h) Lentiviral Particles: sc-88226-V and JMJD4 shRNA (m) Lentiviral Particles: sc-146327-V.

Molecular Weight of JMJD4: 53 kDa.

Positive Controls: human colon extract: sc-363757 or human ovary extract: sc-363769.

DATA



JMJD4 (C-13): sc-131572. Western blot analysis of JMJD4 expression in human colon (A) and human ovary (B) tissue extracts.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


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Try **JMJD4 (D-10): sc-514881**, our highly recommended monoclonal alternative to JMJD4 (C-13).