

# JMJD1C (S-17): sc-83421

## BACKGROUND

JMJD1C (Jumonji domain containing 1C), also known as TRIP8 (thyroid hormone receptor interacting protein 8), is a nuclear protein that belongs to the JHDM2 family of histone demethylases. Expressed in a wide variety of tissues, JMJD1C binds iron as a cofactor and contains one JMJC domain, a TRI8H1 domain with a C2HC4-type zinc finger-like motif and a TRI8H2 domain with a TR $\beta$  (thyroid hormone receptor  $\beta$ )-binding region. JMJD1C demethylates Lysine 9 of Histone H3, thereby playing a central role in the histone code and participating in nuclear hormone receptor-based transcriptional regulation. In addition, JMJD1C plays an important role in the regulation of cell growth during development and in chromatin regulation. Due to alternative splicing events, two isoforms exist for JMJD1C. One of these isoforms functions as a coactivator for the AR (androgen receptor).

## CHROMOSOMAL LOCATION

Genetic locus: JMJD1C (human) mapping to 10q21.3; Jmjd1c (mouse) mapping to 10 B5.1.

## SOURCE

JMJD1C (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JMJD1C of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-83421 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-83421 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

JMJD1C (S-17) is recommended for detection of JMJD1C of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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.

JMJD1C (S-17) is also recommended for detection of JMJD1C in additional species, including canine.

Suitable for use as control antibody for JMJD1C siRNA (h): sc-75357, JMJD1C siRNA (m): sc-75358, JMJD1C shRNA Plasmid (h): sc-75357-SH, JMJD1C shRNA Plasmid (m): sc-75358-SH, JMJD1C shRNA (h) Lentiviral Particles: sc-75357-V and JMJD1C shRNA (m) Lentiviral Particles: sc-75358-V.

JMJD1C (S-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

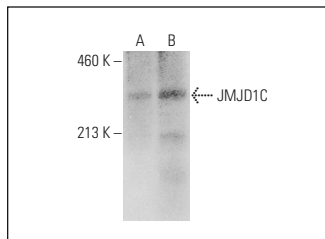
Molecular Weight of JMJD1C: 285 kDa.

Positive Controls: JAR cell lysate: sc-2276, HeLa whole cell lysate: sc-2200 or HEK293 whole cell lysate: sc-45136.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



JMJD1C (S-17): sc-83421. Western blot analysis of JMJD1C expression in HeLa (A) and HEK293 (B) whole cell lysates.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **JMJD1C (BA-09): sc-101073**, our highly recommended monoclonal alternative to JMJD1C (S-17).