

JMJD1C Antibody

JMJD1C: Jumonji domain containing 1C protein, TRIP8

CATALOG No.: 5371

BACKGROUND:

The jumonji domain containing 1C protein (JMJD1C) was initially discovered in silico (1), and later suggested to be a candidate gene for autism (2). Like the related proteins JMJD1A and JMJD1B, JMJD1C is a histone H3K9 demethylase implicated in the nuclear hormone receptor-based transcriptional regulation. JMJD1C mRNA is highly expressed in undifferentiated embryonic stem (ES) cells as well as pancreatic islet, diffuse-type gastric cancer, and other tissues and tumors (3). The JMJD1C gene promoter contain bHLH-, AP-1-, and POU5F1-binding sites (3), and as preferential expression of POU5F1 has been reported in ES cells, pancreatic islet, and diffuse-type gastric cancer (4), it has been suggested that POU5F1-mediated expression of JMJD1C reactivates previously silenced genes in ES cells and diffuse-type gastric cancer (3). At least three isoforms of JMJD1C are known to exist. This antibody will not cross-react with JMJD1A or JMJD1B.

SOURCE:

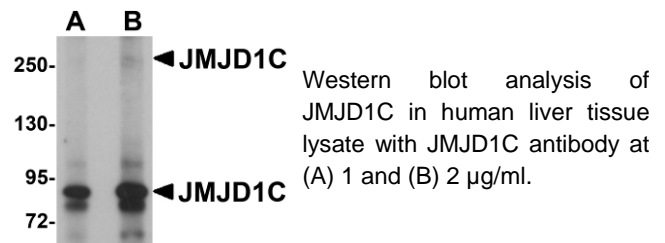
Rabbit polyclonal JMJD1C antibody was raised against a 20 amino acid peptide from near the amino terminus of human JMJD1C (GenBank accession no. NP_116165).

STORAGE:

JMJD1C antibody is supplied as immunoaffinity chromatography purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.

APPLICATION:

JMJD1C antibody can be used for detection of JMJD1C by Western blot at 1 - 2 µg/ml. (Optimal dilution should be determined by user.) Human liver tissue lysate can be used as positive control. JMJD1C antibody is human, mouse and rat reactive. **For research use only.**



RELATED PRODUCTS:

Blocking Peptide, Catalog No. **5371P**.
 Human Liver Tissue Lysate, Catalog No. **1304**.
 JMJD1A Antibody, Catalog No. **5365**.
 JMJD1B Antibody, Catalog No. **5369**.

REFERENCES:

1. Katoh M and Katoh M. Identification of TRIP8 gene in silico. *Int. J. Mol. Med.* 2003; 12:817-21.
2. Castermans D, Vermeesch JR, Fryns JP, et al. Identification and characterization of the TRIP8 and REEP3 genes on chromosome 10q21.3 as novel candidate genes for autism. *Eur. J. Hum. Genet.* 2007; 15:422-31.
3. Katoh M and Katoh M. Comparative integromics on JMJD1C gene encoding histone demethylase: Conserved POU5F1 binding site elucidating mechanism of JMJD1C expression in undifferentiated ES cells and diffuse-type gastric cancer. *Int. J. Oncology* 2007; 31:219-23.
4. Katoh Y and Katoh M. Conserved POU-binding site linked to SP1-binding site within FZD5 promoter: transcriptional mechanism of FZD5 in undifferentiated human ES cells, fetal liver/spleen, adult colon, pancreatic islet, and diffuse-type gastric cancer. *Int. J. Oncol.* 2007; 30:751-5.

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