JMJD8 (Y-15): sc-243129



The Power to Question

BACKGROUND

JMJD8 (Jumonji domain-containing protein 8) is a 334 amino acid protein that contains one Jumonji domain and is expressed as 3 isoforms produced by alternative splicing. The gene that encodes JMJD8 maps to human chromosome 16, which encodes over 900 genes in approximately 90 million base pairs, making up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16 through the CREBBP gene, which encodes a critical CREB binding protein. Signs of Rubinstein-Taybi include mental retardation and predisposition to tumor growth and white blood cell neoplasias. Crohn's disease is a gastrointestinal inflammatory condition associated with chromosome 16 through the NOD2 gene. An association with systemic lupus erythematosis and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: JMJD8 (human) mapping to 16p13.3; Jmjd8 (mouse) mapping to 17 A3.3.

SOURCE

JMJD8 (Y-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JMJD8 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-243129 P, ($100 \mu \text{g}$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JMJD8 (Y-15) is recommended for detection of JMJD8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

JMJD8 (Y-15) is also recommended for detection of JMJD8 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for JMJD8 siRNA (h): sc-93357, JMJD8 siRNA (m): sc-108778, JMJD8 shRNA Plasmid (h): sc-93357-SH, JMJD8 shRNA Plasmid (m): sc-108778-SH, JMJD8 shRNA (h) Lentiviral Particles: sc-93357-V and JMJD8 shRNA (m) Lentiviral Particles: sc-108778-V.

Molecular Weight of JMJD8: 32 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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) 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.

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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