SANTA CRUZ BIOTECHNOLOGY, INC.

JMJD8 (D-20): sc-243128

SANTA CRUZ BIOTECHNOLOGY

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 three 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

1. Ben Hamida, C., et al. 1997. Homozygosity mapping of giant axonal neuropathy gene to chromosome 16q24.1. Neurogenetics 1: 129-133.
2. Karlsson, J., et al. 2003. Novel quantitative trait loci controlling development of experimental autoimmune encephalomyelitis and proportion of lymphocyte subpopulations. J. Immunol. 170: 1019-1026.
3. Forabosco, P., et al. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. Genes Immun. 7: 609-614.
4. Carneiro, L.A., et al. 2007. Nod-like receptors in innate immunity and inflammatory diseases. Ann. Med. 39: 581-593.
5. King, K., et al. 2007. Identification, evolution, and association study of a novel promoter and first exon of the human NOD2 (CARD15) gene. Genomics 90: 493-501.
6. Gervasini, C., et al. 2007. High frequency of mosaic CREBBP deletions in Rubinstein-Taybi syndrome patients and mapping of somatic and germ-line breakpoints. Genomics 90: 567-573.
7. Koop, O., et al. 2007. Genotype-phenotype analysis in patients with giant axonal neuropathy (GAN). Neuromuscul. Disord. 17: 624-630.

CHROMOSOMAL LOCATION

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

SOURCE

JMJD8 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JMJD8 of human origin.

STORAGE

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

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-243128 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JMJD8 (D-20) 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), 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.

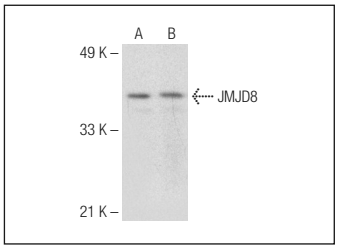
JMJD8 (D-20) is also recommended for detection of JMJD8 in additional species, including equine, canine, bovine and porcine.

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 or KNRK whole cell lysate: sc-2214

DATA



JMJD8 (D-20): sc-243128. Western blot analysis of JMJD8 expression in Jurkat (**A**) and KNRK (**B**) whole cell lysates.

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.