

FAHD1 (P-14): sc-136675

BACKGROUND

FAHD1 (fumarylacetoacetate hydrolase domain-containing protein 1), also known as YISKL (YisK-like protein) or C16orf36, is a 224 amino acid protein belonging to the FAH family. Present as a homodimer, FAHD1 is thought to have hydrolase activity and uses magnesium and calcium as cofactors. The gene that encodes FAHD1 maps to human chromosome 16, which encodes over 900 genes in approximately 90 million base pairs, making up nearly 3% of human cellular DNA. 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, though 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 erythematosus 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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4. Forabosco, P., et al. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. *Genes Immun.* 7: 609-614.
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6. 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.
7. 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.
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CHROMOSOMAL LOCATION

Genetic locus: FAHD1 (human) mapping to 16p13.3; Fahd1 (mouse) mapping to 17 A3.3.

RESEARCH USE

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

SOURCE

FAHD1 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FAHD1 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-136675 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAHD1 (P-14) is recommended for detection of FAHD1 isoforms 1 and 2 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 FAHD2A or FAHD2B.

FAHD1 (P-14) is also recommended for detection of FAHD1 isoforms 1 and 2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for FAHD1 siRNA (h): sc-93487, FAHD1 siRNA (m): sc-145006, FAHD1 shRNA Plasmid (h): sc-93487-SH, FAHD1 shRNA Plasmid (m): sc-145006-SH, FAHD1 shRNA (h) Lentiviral Particles: sc-93487-V and FAHD1 shRNA (m) Lentiviral Particles: sc-145006-V.

Molecular Weight of FAHD1: 25 kDa.

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.

PROTOCOLS

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