

FIT1 (E-14): sc-164403

BACKGROUND

FIT1 (fat storage-inducing transmembrane protein 1) is a 292 amino acid multi-pass membrane protein that belongs to an evolutionarily conserved family of proteins involved in fat storage, the FIT family. The FIT1 protein plays an important role in lipid droplet accumulation. Primarily expressed in heart and skeletal muscle, FIT1 is also expressed in liver, kidney and testis. Existing as two alternatively spliced isoforms, the FIT1 gene is conserved in chimpanzee, canine, bovine, mouse, rat and zebrafish, and maps to human chromosome 14q12. Chromosome 14 contains about 700 genes and 106 million base pairs and makes up about 3.5% of human cellular DNA. Chromosome 14 encodes the presenilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease. The SERPINA1 gene is located on chromosome 14 and when defective leads to the genetic disorder α 1-antitrypsin deficiency. This disorder is characterized by severe lung complications and liver dysfunction.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FITM1 (human) mapping to 14q12; Fitm1 (mouse) mapping to 14 C3.

SOURCE

FIT1 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of FIT1 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 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-164403 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FIT1 (E-14) is recommended for detection of FIT1 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).

FIT1 (E-14) is also recommended for detection of FIT1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for FIT1 siRNA (h): sc-92237, FIT1 siRNA (m): sc-145187, FIT1 shRNA Plasmid (h): sc-92237-SH, FIT1 shRNA Plasmid (m): sc-145187-SH, FIT1 shRNA (h) Lentiviral Particles: sc-92237-V and FIT1 shRNA (m) Lentiviral Particles: sc-145187-V.

Molecular Weight of FIT1 isoforms: 32/11 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.

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.