Fatso (W-13): sc-83813



The Power to Question

BACKGROUND

Fatso, also known as FTO or KIAA1752, is a 505 amino acid protein that has an N-terminal nuclear localization signal. Expressed in a variety of tissues, with highest levels present in brain and pancreatic tissue, Fatso exists as four alternatively spliced isoforms, one of which is associated with a predisposition to childhood and adult obesity. Due to its involvement in the development of obesity, Fatso is associated with an increased BMI and may be involved in the pathogenesis of type 2 diabetes. The gene encoding Fatso maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. 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, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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- 3. Field, S.F., et al. 2007. Analysis of the obesity gene FTO in 14,803 type 1 diabetes cases and controls. Diabetologia 50: 2218-2220.
- 4. Dina, C., et al. 2007. Variation in FTO contributes to childhood obesity and severe adult obesity. Nat. Genet. 39: 724-726.
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- Frayling, T.M., et al. 2007. A common variant in the FTO gene is associated with body mass index and predisposes to childhood and adult obesity. Science 316: 889-894.
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CHROMOSOMAL LOCATION

Genetic locus: FTO (human) mapping to 16q12.2; Fto (mouse) mapping to 8 C5.

SOURCE

Fatso (W-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Fatso of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83813 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Fatso (W-13) is recommended for detection of Fatso 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).

Suitable for use as control antibody for Fatso siRNA (h): sc-75002, Fatso siRNA (m): sc-75003, Fatso shRNA Plasmid (h): sc-75002-SH, Fatso shRNA Plasmid (m): sc-75003-SH, Fatso shRNA (h) Lentiviral Particles: sc-75002-V and Fatso shRNA (m) Lentiviral Particles: sc-75003-V.

Molecular Weight of Fatso: 58 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.

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.



Try Fatso (C-3): sc-271713 or Fatso (G-1): sc-515410, our highly recommended monoclonal alternatives to Fatso (W-13).

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