

# Fatso (H-300): sc-98768

## 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

1. Peters, T., et al. 1999. Cloning of Fatso (FTO), a novel gene deleted by the Fused toes (Ft) mouse mutation. *Mamm. Genome* 10: 983-986.
2. Dina, C., et al. 2007. Variation in FTO contributes to childhood obesity and severe adult obesity. *Nat. Genet.* 39: 724-726.

## CHROMOSOMAL LOCATION

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

## SOURCE

Fatso (H-300) is a rabbit polyclonal antibody raised against amino acids 252-505 mapping at the C-terminus of Fatso 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.

## APPLICATIONS

Fatso (H-300) 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), 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).

Fatso (H-300) is also recommended for detection of Fatso in additional species, including equine, canine, bovine and porcine.

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.

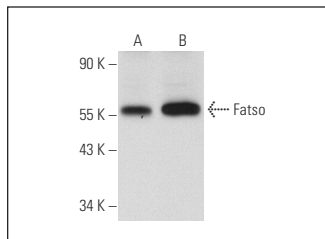
Molecular Weight of Fatso: 58 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, mouse pancreas extract: sc-364244 or SW-13 cell lysate: sc-24778.

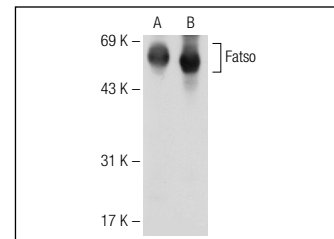
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Fatso (H-300): sc-98768. Western blot analysis of Fatso expression in SW-13 (A) and SK-N-MC (B) whole cell lysates.



Fatso (H-300): sc-98768. Western blot analysis of Fatso expression in mouse pancreas tissue extract (A) and MIA PaCa-2 whole cell lysate (B).

## SELECT PRODUCT CITATIONS

1. Wang, P., et al. 2011. Involvement of leptin receptor long isoform (LepRb)-STAT3 signaling pathway in brain fat mass- and obesity-associated (FTO) downregulation during energy restriction. *Mol. Med.* 17: 523-532.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Satisfaction  
Guaranteed

Try **Fatso (C-3): sc-271713** or **Fatso (G-1): sc-515410**, our highly recommended monoclonal alternatives to Fatso (H-300).