

FAT10 (S-14): sc-51085

BACKGROUND

FAT10, also designated Ubiquitin D or Diubiquitin, is a 165 amino acid protein encoded in the major histocompatibility complex (MHC) that consists of 2 domains which share significant homology with ubiquitin. Each domain contains two cysteines, along with a free C-terminal diglycine motif required for FAT10 conjugate formation. FAT10 is inducible by interferon- γ and tumor necrosis factor α (TNF α). The FAT10 protein interacts with MAD2, a component of the spindle checkpoint, and plays a role in antigen presentation, cytokine response, apoptosis and mitosis. It may also regulate cell growth during dendritic cell or B cell activation and development. FAT10 mRNA is expressed mainly in some dendritic cells and lymphoblastoid lines and in other specific cells subsequent to interferon- γ induction. The human FAT10 gene, designated UBD, maps to chromosome 6p21.3 and is overexpressed in the tumors of various epithelial cancers.

REFERENCES

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4. Online Mendelian Inheritance in Man, OMIM. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606050. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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8. Ren, J., et al. 2006. FAT10 plays a role in the regulation of chromosomal stability. *J. Biol. Chem.* 281: 11413-11421.
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CHROMOSOMAL LOCATION

Genetic locus: Ubd (mouse) mapping to 17 B1.

SOURCE

FAT10 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FAT10 of mouse 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-51085 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAT10 (S-14) is recommended for detection of FAT10 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

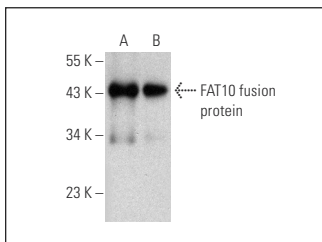
Suitable for use as control antibody for FAT10 siRNA (m): sc-60628, FAT10 shRNA Plasmid (m): sc-60628-SH and FAT10 shRNA (m) Lentiviral Particles: sc-60628-V.

Molecular Weight of FAT10: 18 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



FAT10 (S-14): sc-51085. Western blot analysis of human recombinant FAT10 (A) and mouse recombinant FAT10 (B) fusion proteins.

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.