

## FAT10 (FL-165): sc-67203

### 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- $\gamma$  and tumor necrosis factor  $\alpha$  (TNF $\alpha$ ). 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- $\gamma$  induction. The human FAT10 gene, designated UBD, maps to chromosome 6p22.1 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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6. Lim, C.B., et al. 2006. FAT10, a gene upregulated in various cancers, is cell-cycle regulated. *Cell Div.* 1: 20.
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8. Zhang, D.W., et al. 2006. p53 negatively regulates the expression of FAT10, a gene upregulated in various cancers. *Oncogene* 25: 2318-2327.
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### CHROMOSOMAL LOCATION

Genetic locus: UBD (human) mapping to 6p22.1; Ubd (mouse) mapping to 17 B1.

### SOURCE

FAT10 (FL-165) is a rabbit polyclonal antibody raised against amino acids 1-165 representing full length FAT10 of human origin.

### RESEARCH USE

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

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

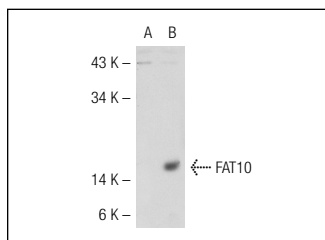
FAT10 (FL-165) is recommended for detection of FAT10 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting 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 (h): sc-60627, FAT10 siRNA (m): sc-60628, FAT10 shRNA Plasmid (h): sc-60627-SH, FAT10 shRNA Plasmid (m): sc-60628-SH, FAT10 shRNA (h) Lentiviral Particles: sc-60627-V and FAT10 shRNA (m) Lentiviral Particles: sc-60628-V.

Molecular Weight of FAT10: 18 kDa.

Positive Controls: FAT10 (h): 293T Lysate: sc-113806 or HeLa whole cell lysate: sc-2200.

### DATA



FAT10 (FL-165): sc-67203. Western blot analysis of FAT10 expression in non-transfected: sc-117752 (A) and human FAT10 transfected: sc-113806 (B) 293T whole cell lysates.

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

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Try **FAT10 (A-8): sc-393630** or **FAT10 (G-5): sc-133199**, our highly recommended monoclonal alternatives to FAT10 (FL-165).