

FTS (T-15): sc-241466

BACKGROUND

Fused toes protein homolog (FTS), also known as AKT-interacting protein (AKTIP) and Ft1, is a 292 amino acid protein that localizes to the cytoplasm and the cell membrane. A member of the ubiquitin-conjugating enzyme family, FTS binds directly to AKT1 to regulate apoptosis in a cell population. AKT1 is a protein that plays a critical role in a number of cellular responses, such as cell growth, protein synthesis, and antiapoptotic signaling. The interaction of FTS and AKT1 enhances the phosphorylation and activation of AKT1, which, through an AKT1/GSK-3 β /NFATc1 signaling cascade, results in the increased production of the proapoptotic hormone Fas ligand and thus an increase in apoptosis.

REFERENCES

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3. Wick, M.J., et al. 2000. Mechanism of phosphorylation of protein kinase B/Akt by a constitutively active 3-phosphoinositide-dependent protein kinase-1. *J. Biol. Chem.* 275: 40400-40406.
4. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608483. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Troussard, A.A., et al. 2003. Conditional knock-out of integrin-linked kinase demonstrates an essential role in protein kinase B/Akt activation. *J. Biol. Chem.* 278: 22374-22378.
6. Remy, I., et al. 2004. Regulation of apoptosis by the Ft1 protein, a new modulator of protein kinase B/Akt. *Mol. Cell. Biol.* 24: 1493-1504.
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CHROMOSOMAL LOCATION

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

SOURCE

FTS (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FTS 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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-241466 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FTS (T-15) is recommended for detection of FTS 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).

FTS (T-15) is also recommended for detection of FTS in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FTS siRNA (h): sc-93013, FTS siRNA (m): sc-145262, FTS shRNA Plasmid (h): sc-93013-SH, FTS shRNA Plasmid (m): sc-145262-SH, FTS shRNA (h) Lentiviral Particles: sc-93013-V and FTS shRNA (m) Lentiviral Particles: sc-145262-V.

Molecular Weight of FTS: 33 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

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.