

TAUT (C-15): sc-47450

BACKGROUND

Taurine is an abundant organic osmolyte that possesses antioxidant and immunomodulatory properties and plays a role in cell volume homeostasis. Taurine is taken up into cells via the taurine transporter (TAUT). TAUT, which is sodium- and chloride-dependent, is a multi-pass membrane protein belonging to the sodium neurotransmitter symporter (SNF) family of proteins. TNF α upregulates TAUT expression, while phosphorylation on Serine 322 down-regulates it. Overexpression of TAUT protects renal cells from cisplatin-induced nephrotoxicity.

REFERENCES

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2. Ramamoorthy, S., et al. 1994. Functional characterization and chromosomal localization of a cloned taurine transporter from human placenta. *Biochem. J.* 300: 893-900.
3. Miyamoto, Y., et al. 1996. Isolation of a cDNA encoding a taurine transporter in the human retinal pigment epithelium. *Curr. Eye Res.* 15: 345-349.
4. Takasaki, M., et al. 2004. Physiological significance of the taurine transporter and taurine biosynthetic enzymes in 3T3-L1 adipocytes. *Biofactors* 21: 419-421.
5. Voss, J.W., et al. 2004. Regulation of the expression and subcellular localization of the taurine transporter TAUT in mouse NIH/3T3 fibroblasts. *Eur. J. Biochem.* 271: 4646-4658.
6. Friedrich, B., et al. 2005. Influence of standard haemodialysis treatment on transcription of human serum- and glucocorticoid-inducible kinase SGK1 and taurine transporter TAUT in blood leukocytes. *Nephrol. Dial. Transplant.* 20: 768-774.

CHROMOSOMAL LOCATION

Genetic locus: SLC6A6 (human) mapping to 3p25.1; Slc6a6 (mouse) mapping to 6 D1.

SOURCE

TAUT (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TAUT of human origin.

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-47450 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

TAUT (C-15) is recommended for detection of TAUT 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 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 TAUT siRNA (h): sc-61648, TAUT siRNA (m): sc-61649, TAUT shRNA Plasmid (h): sc-61648-SH, TAUT shRNA Plasmid (m): sc-61649-SH, TAUT shRNA (h) Lentiviral Particles: sc-61648-V and TAUT shRNA (m) Lentiviral Particles: sc-61649-V.

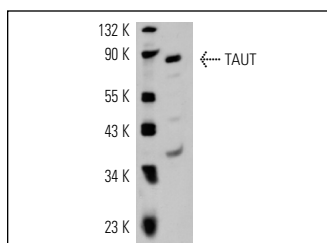
Molecular Weight of TAUT isoforms: 49-132 kDa.

Positive Controls: ARPE-19 whole cell lysate: sc-364357, Jurkat whole cell lysate: sc-2204 or Y79 cell lysate: sc-2240.

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



TAUT (C-15): sc-47450. Western blot analysis of TAUT expression in ARPE-19 whole cell lysate.

RESEARCH USE

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



Try **TAUT (A-11): sc-393036** or **TAUT (E-10): sc-166640**, our highly recommended monoclonal alternatives to TAUT (C-15).