

TTLL5 (C-16): sc-244538

BACKGROUND

A large protein group known as the tubulin tyrosine ligase-like (TTLL) family is implied to catalyze ligations of amino acids to tubulins and other substrates. Each member contains a characteristic TTL domain. TTLL5 (tubulin tyrosine ligase-like family, member 5), also known as STAMP (SRC1 and TIF2-associated modulatory protein), is a 1,281 nuclear and cytoplasmic protein that belongs to the tubulin-tyrosine ligase family. Containing one TTL domain, TTLL5 is highly expressed in heart and skeletal muscle and lowly expressed in other tissues. TTLL5 plays a role as a tubulin polyglutamylase and participates in forming polyglutamate side chains on tubulin. TTLL5 interacts with and magnifies the effect of transcriptional coactivator GRIP-1, thereby regulating glucocorticoid receptor-mediated repression and induction as well as in androgen receptor-mediated induction. TTLL5 exists as three alternatively spliced isoforms and is encoded by a gene located on human chromosome 14q24.3.

REFERENCES

1. Trichet, V., et al. 2000. Characterization of the human tubulin tyrosine ligase-like 1 gene (TTLL1) mapping to 22q13.1. *Gene* 257: 109-117.
2. Janke, C., et al. 2005. Tubulin polyglutamylase enzymes are members of the TTL domain protein family. *Science* 308: 1758-1762.
3. He, Y., et al. 2007. STAMP, a novel predicted factor assisting TIF2 actions in glucocorticoid receptor-mediated induction and repression. *Mol. Cell Biol.* 27: 1467-1485.
4. van Dijk, J., et al. 2008. Polyglutamylation is a post-translational modification with a broad range of substrates. *J. Biol. Chem.* 283: 3915-3922.
5. Sun, Y., et al. 2008. Modulation of transcription parameters in glucocorticoid receptor-mediated repression. *Mol. Cell. Endocrinol.* 295: 59-69.
6. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612268. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: TTLL5 (human) mapping to 14q24.3; Ttl5 (mouse) mapping to 12 D2.

SOURCE

TTLL5 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TTLL5 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.

Blocking peptide available for competition studies, sc-244538 P, (100 µg 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

TTLL5 (C-16) is recommended for detection of TTLL5 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).

TTLL5 (C-16) is also recommended for detection of TTLL5 in additional species, including canine and bovine.

Suitable for use as control antibody for TTLL5 siRNA (h): sc-92129, TTLL5 siRNA (m): sc-154793, TTLL5 shRNA Plasmid (h): sc-92129-SH, TTLL5 shRNA Plasmid (m): sc-154793-SH, TTLL5 shRNA (h) Lentiviral Particles: sc-92129-V and TTLL5 shRNA (m) Lentiviral Particles: sc-154793-V.

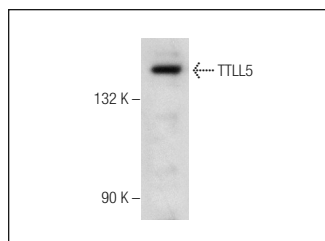
Molecular Weight of TTLL5 isoforms: 144/92/31 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225.

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



TTLL5 (C-16): sc-244538. Western blot analysis of TTLL5 expression in CCRF-CEM whole cell lysate.

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.