

HOTTL (N-20): sc-67597

BACKGROUND

HOTTL (Tubulin-tyrosine ligase-like protein 3) is a 352 amino acid protein encoded by the human gene TTL3. HOTTL is believed to be part of the Tubulin-tyrosine ligase family and contains one TTL domain. The TTL domain is an approximately 350 amino acid module present in a family of eukaryotic proteins that could catalyze ligations of diverse amino acids to tubulins or other substrates. The TTL domain contains ATP-grasp-like motifs that correspond to the ATP/Mg²⁺ binding site typical of enzymes with ATP-dependent carboxylate-amine/thiol ligase activity. Subject to several posttranslational modifications, assembled microtubules are detyrosinated over time at the C-terminus of α Tubulin. After microtubular disassembly, TTL proteins restore tyrosine residues back to the detyrosinated Tubulin, leading to a cycle of detyrosination/tyrosination. HOTTL also may play a role in tumor cell regulation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TTL3 (human) mapping to 3p25.3.

SOURCE

HOTTL (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of HOTTL 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-67597 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HOTTL (N-20) is recommended for detection of HOTTL of 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).

HOTTL (N-20) is also recommended for detection of HOTTL in additional species, including equine and porcine.

Suitable for use as control antibody for HOTTL siRNA (h): sc-62474, HOTTL shRNA Plasmid (h): sc-62474-SH and HOTTL shRNA (h) Lentiviral Particles: sc-62474-V.

Molecular Weight of HOTTL: 40 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) 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.

STORAGE

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

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.