SANTA CRUZ BIOTECHNOLOGY, INC.

TTL (E-14): sc-137886

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TTL (tubulin tyrosine ligase) is a 377 amino acid cytosolic enzyme that catalyzes the addition of tyrosine to the C-terminal end of α Tubulin following translation. Essential for neuronal organization, TTL binds magnesium and potassium as cofactors and exists as a monomer. TTL contains one TTL domain, belongs to the tubulin-tyrosine ligase family, and is encoded by a gene that maps to human chromosome 2q13. Human chromosome 2 consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2, including Harlequin icthyosis, sitosterolemia and Alström syndrome.

REFERENCES

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4. Mialhe, A., et al. 2001. Tubulin detyrosination is a frequent occurrence in breast cancers of poor prognosis. Cancer Res. 61: 5024-5027.
5. Erck, C., et al. 2003. Cloning and genomic organization of the TTL gene on mouse chromosome 2 and human chromosome 2q13. Cytogenet. Genome Res. 101: 47-53.
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8. Erck, C., et al. 2005. A vital role of tubulin-tyrosine-ligase for neuronal organization. Proc. Natl. Acad. Sci. USA 102: 7853-7858.
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CHROMOSOMAL LOCATION

Genetic locus: TTL (human) mapping to 2q13; Ttl (mouse) mapping to 2 F1.

SOURCE

TTL (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TTL 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.

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-137886 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TTL (E-14) is recommended for detection of TTL 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).

TTL (E-14) is also recommended for detection of TTL in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for TTL siRNA (h): sc-94871, TTL siRNA (m): sc-154785, TTL shRNA Plasmid (h): sc-94871-SH, TTL shRNA Plasmid (m): sc-154785-SH, TTL shRNA (h) Lentiviral Particles: sc-94871-V and TTL shRNA (m) Lentiviral Particles: sc-154785-V.

Molecular Weight of TTL: 43 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.

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.