SANTA CRUZ BIOTECHNOLOGY, INC.

TRH (E-17): sc-99691

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TRH (thyrotrophin-releasing hormone), also known as TRF, Prothyroliberin or Thyroliberin, is a 242 amino acid secreted protein that belongs to the TRH family and is expressed in the hypothalamus in response to hypothyroidism. TRH is a hypothalamic tripeptide that stimulates the release of thyrotrophin (TSH) and prolactin through its receptor in the anterior pituitary gland. In addition to regulating the biosynthesis of TSH, TRH acts as a neurotransmitter and a neuromodulator in the central and peripheral nervous systems. An integral membrane ectopeptidase protein, PGP-II (pyroglutamyl peptidase II), cleaves and inactivates TRH in neural and hormonal transmissions. TRH may function as a melanoma autocrine growth factor in melanomas and dysplastic nevi.

REFERENCES

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9. Prokai-Tatrai, K. and Prokai, L. 2009. Prodrugs of thyrotropin-releasing hormone and related peptides as central nervous system agents. Molecules 14: 633-654.

STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: 3q21.3 (human) mapping to 3q21.3.

SOURCE

TRH (E-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of TRH of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99691 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRH (E-17) is recommended for detection of TRH 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).

Suitable for use as control antibody for TRH siRNA (h): sc-77977, TRH shRNA Plasmid (h): sc-77977-SH and TRH shRNA (h) Lentiviral Particles: sc-77977-V.

Molecular Weight of TRH: 30 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.