TRH-R1 (N-17): sc-11570



The Power to Ougatio

BACKGROUND

Thyrotrophin-releasing hormone (TRH) is a hypothalamic tripeptide that stimulates, via its receptor in the anterior pituitary gland, the release of thyrotrophin (TSH) and prolactin. The TRH receptors, TRH-R1 and TRH-R2, are G protein-coupled proteins containing seven transmembrane domains and other conserved regions. In rat, two isoforms exist, TRH-R (412) and TRH-R (387), that differ at their carboxy termini. TRH receptors are distributed throughout the central and peripheral nervous systems and are present in a variety of tissues. TRH-R2 displays 50% homology to TRH-R1 and is more restricted to the central nervous system than TRH-R1. Mutation in the TRH receptor gene is associated with isolated central hypothyroidism, a rare disorder characterized by insufficient TSH secretion resulting in low levels of thyroid hormones.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TRHR (human) mapping to 8q23.1; Trhr (mouse) mapping to 15 B3.2.

SOURCE

TRH-R1 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TRH-R1 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-11570 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRH-R1 (N-17) is recommended for detection of TRH-R1 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).

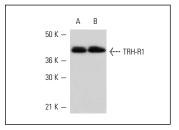
TRH-R1 (N-17) is also recommended for detection of TRH-R1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TRH-R1 siRNA (h): sc-106635, TRH-R1 siRNA (m): sc-154637, TRH-R1 shRNA Plasmid (h): sc-106635-SH, TRH-R1 shRNA Plasmid (m): sc-154637-SH, TRH-R1 shRNA (h) Lentiviral Particles: sc-106635-V and TRH-R1 shRNA (m) Lentiviral Particles: sc-154637-V.

Molecular Weight of TRH-R1: 41 kDa.

Positive Controls: rat cerebellum extract: sc-2398 or mouse brain extract: sc-2253.

DATA



TRH-R1 (N-17): sc-11570. Western blot analysis of TRH-R1 expression in rat cerebellum (**A**) and mouse brain (**B**) tissue extracts.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**