

TRH-DE (H-267): sc-382220

BACKGROUND

TRH-DE (thyrotropin-releasing hormone degrading enzyme), also known as PAP-II or PGPEP2, is a 1,024 amino acid single-pass type II membrane protein that belongs to the peptidase M1 family and is expressed predominately in brain. Existing as a disulfide-linked homodimer, TRH-DE uses zinc as a cofactor to catalyze the cleavage and subsequent inactivation of TRH. Human TRH-DE shares 96% sequence identity with its rat counterpart, suggesting a conserved role between species. The gene encoding TRH-DE maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and Trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

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4. Bödeker, H., et al. 1999. PAP I interacts with itself, PAP II, PAP III, and lithostathine/regl α . *Mol. Cell Biol. Res. Commun.* 2: 150-154.
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6. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606950. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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CHROMOSOMAL LOCATION

Genetic locus: TRHDE (human) mapping to 12q21.1; Trhde (mouse) mapping to 10 D2.

SOURCE

TRH-DE (H-267) is a rabbit antibody raised against amino acids 723-989 mapping near the C-terminus of TRH-DE 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.

APPLICATIONS

TRH-DE (H-267) is recommended for detection of TRH-DE of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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-DE (H-267) is also recommended for detection of TRH-DE in additional species, including equine, bovine, porcine and canine.

Suitable for use as control antibody for TRH-DE siRNA (h): sc-76728, TRH-DE siRNA (m): sc-76729, TRH-DE shRNA Plasmid (h): sc-76728-SH, TRH-DE shRNA Plasmid (m): sc-76729-SH, TRH-DE shRNA (h) Lentiviral Particles: sc-76728-V and TRH-DE shRNA (m) Lentiviral Particles: sc-76729-V.

Molecular Weight of TRH-DE: 117 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

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.