SANTA CRUZ BIOTECHNOLOGY, INC.

THADA (S-12): sc-161237

BACKGROUND

THADA (thyroid adenoma associated), also known as GITA, is a 1,953 amino acid protein that is expressed in testis, thyroid, pancreas, stomach and small intestine. Chromosomal aberrations in the gene encoding THADA are associated with benign thyroid adenomas, suggesting a potential role for THADA in tumorigenesis. The THADA gene maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the chromosome 2-localized ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes, which also map to chromosome 2.

REFERENCES

1. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. Proc. Natl. Acad. Sci. USA 88: 9051-9055.
2. Nagase, T., et al. 2000. Prediction of the coding sequences of unidentified human genes. XIX. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 7: 347-355.
3. Bol, S., et al. 2001. Molecular cytogenetic investigations define a subgroup of thyroid adenomas with 2p21 breakpoints clustered to a region of less than 450 kb. Cytogenet. Cell Genet. 95: 189-191.
4. Rippe, V., et al. 2003. Identification of a gene rearranged by 2p21 aberrations in thyroid adenomas. Oncogene 22: 6111-6114.
5. Drieschner, N., et al. 2006. Evidence for a 3p25 breakpoint hot spot region in thyroid tumors of follicular origin. Thyroid 16: 1091-1096.
6. Drieschner, N., et al. 2007. A domain of the thyroid adenoma associated gene (THADA) conserved in vertebrates becomes destroyed by chromosomal rearrangements observed in thyroid adenomas. Gene 403: 110-117.

CHROMOSOMAL LOCATION

Genetic locus: THADA (human) mapping to 2p21; Thada (mouse) mapping to 17 E4.

SOURCE

THADA (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of THADA 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-161237 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

THADA (S-12) is recommended for detection of THADA 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).

Suitable for use as control antibody for THADA siRNA (h): sc-94767, THADA siRNA (m): sc-154243, THADA shRNA Plasmid (h): sc-94767-SH, THADA shRNA Plasmid (m): sc-154243-SH, THADA shRNA (h) Lentiviral Particles: sc-94767-V and THADA shRNA (m) Lentiviral Particles: sc-154243-V.

Molecular Weight of THADA: 220 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.