

TDAG8 (T-19): sc-9706

BACKGROUND

TDAG8 (for T-cell death-associated gene 8) is a seven transmembrane G protein-coupled receptor (GPCR) that was originally identified from a human thyroid cDNA library and subsequently shown to be expressed predominantly in thymus, lymph nodes, peripheral blood leukocytes and spleen. TDAG8, which is alternatively designated GPCR25, is grouped collectively with other GPCRs that are induced during T cell receptor engagement-mediated apoptosis and T cell activation, which also include G2A (for G₂ accumulation) and P2Y2 (for P2 nucleotide) receptor. TDAG8 expression is highest during T cell death that is mediated by T cell receptors, phorbol esters or glucocorticoids, suggesting that TDAG8 may participate in activation-induced cell death or differentiation of T cells. Human TDAG8 maps to chromosome 14q31.3. Abnormalities of this region have been associated with human T cell lymphomas and leukemia.

REFERENCES

- Choi, J.W., et al. 1996. Identification of a putative G protein-coupled receptor induced during activation-induced apoptosis of T cells. *Cell Immunol.* 168: 78-84.
- Koshiba, M., et al. 1997. Transient up-regulation of P2Y2 nucleotide receptor mRNA expression is an immediate early gene response in activated thymocytes. *Proc. Natl. Acad. Sci. USA* 94: 831-836.
- Kyaw, H., et al. 1998. Cloning, characterization, and mapping of human homolog of mouse T-cell death-associated gene. *DNA Cell Biol.* 17: 493-500.
- Weng, Z., et al. 1998. A DNA damage and stress inducible G protein-coupled receptor blocks cells in G₂/M. *Proc. Natl. Acad. Sci. USA* 95: 12334-12339.
- Tomer, Y., et al. 1998. Linkage analysis of candidate genes in autoimmune thyroid disease. III. Detailed analysis of chromosome 14 localizes Graves' disease-1 (GD-1) close to multinodular goiter-1 (MNG-1). International consortium for the genetics of autoimmune Thyroid disease. *J. Clin. Endocrinol. Metab.* 83: 4321-4327.

CHROMOSOMAL LOCATION

Genetic locus: GPR65 (human) mapping to 14q31.3.

SOURCE

TDAG8 (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TDAG8 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-9706 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

TDAG8 (T-19) is recommended for detection of TDAG8 of 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).

TDAG8 (T-19) is also recommended for detection of TDAG8 in additional species, including equine.

Suitable for use as control antibody for TDAG8 siRNA (h): sc-40198, TDAG8 shRNA Plasmid (h): sc-40198-SH and TDAG8 shRNA (h) Lentiviral Particles: sc-40198-V.

Molecular Weight of TDAG8: 40 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, HL-60 + PMA cell lysate: sc-24705 or Jurkat whole cell lysate: sc-2204.

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.

STORAGE

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

PROTOCOLS

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