

TDAG8 (N-19): sc-9705

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 thymoid 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.

CHROMOSOMAL LOCATION

Genetic locus: GPR65 (human) mapping to 14q31.3; Gpr65 (mouse) mapping to 12 E.

SOURCE

TDAG8 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-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-9705 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.

PROTOCOLS

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

APPLICATIONS

TDAG8 (N-19) is recommended for detection of TDAG8 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

TDAG8 (N-19) is also recommended for detection of TDAG8 in additional species, including canine and porcine.

Suitable for use as control antibody for TDAG8 siRNA (h): sc-40198, TDAG8 siRNA (m): sc-40199, TDAG8 shRNA Plasmid (h): sc-40198-SH, TDAG8 shRNA Plasmid (m): sc-40199-SH, TDAG8 shRNA (h) Lentiviral Particles: sc-40198-V and TDAG8 shRNA (m) Lentiviral Particles: sc-40199-V.

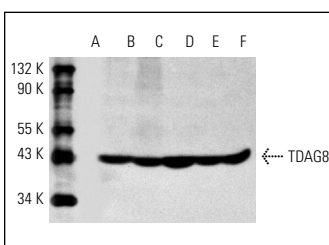
Molecular Weight of TDAG8: 40 kDa.

Positive Controls: mouse thymus extract: sc-2406, mouse spleen extract: sc-2391 or CCRF-CEM cell lysate: sc-2225.

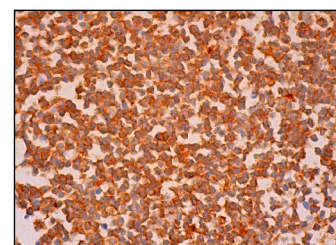
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



TDAG8 (N-19): sc-9705. Western blot analysis of TDAG8 expression in mouse thymus (A) and mouse spleen (B) extracts and CCRF-CEM (C), PMA-treated HL-60 (D), CD3 (21-L5)-treated Jurkat (E) and untreated Jurkat (F) whole cell lysates.



TDAG8 (N-19): sc-9705. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing membrane and cytoplasmic staining of cells in germinal centers and cells in non-germinal centers.

RESEARCH USE

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