

TDAG51 (H-150): sc-28242

BACKGROUND

Cytotoxic T lymphocyte (CTL)-mediated cytotoxicity constitutes an important component of specific effector mechanisms in immuno-surveillance against virus-infected or virus-transformed cells. Two mechanisms appear to account for this activity, one of which is the perforin-based process. Independently, a FAS-based mechanism involves the transducing molecule FAS (APO-1) and its ligand (FAS-L). The human FAS (APO-1) protein is a cell surface glycoprotein that belongs to a family of receptors that includes CD40, nerve growth factor receptors and tumor necrosis factor receptors. The FAS antigen is expressed on a broad range of lymphoid cell lines, and is expressed at high levels in T cells subsequent to crosslinking of the T cell receptor (TCR). A previously undescribed protein, TDAG51, restores activation induced apoptosis in cells that have lost the ability to display Fas in response to activation. Thus, TDAG51 plays a critical role in T cell apoptosis by coupling TCR stimulation to Fas expression.

REFERENCES

- Henkart, P.A. 1985. Mechanism of lymphocyte-mediated cytotoxicity. *Ann. Rev. Immunol.* 3: 31-58.
- Young, J.D.E., et al. 1988. Perforin-dependent and -independent pathways of cytotoxicity mediated by lymphocytes. *Immunol. Rev.* 103: 161-202.

CHROMOSOMAL LOCATION

Genetic locus: PHLDA1 (human) mapping to 12q21.2; Phlda1 (mouse) mapping to 10 D1.

SOURCE

TDAG51 (H-150) is a rabbit polyclonal antibody raised against amino acids 1-150 mapping at the N-terminus of TDAG51 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.

APPLICATIONS

TDAG51 (H-150) is recommended for detection of TDAG51 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), immunohistochemistry (including paraffin-embedded sections) (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 TDAG51 siRNA (h): sc-36631, TDAG51 siRNA (m): sc-36632, TDAG51 shRNA Plasmid (h): sc-36631-SH, TDAG51 shRNA Plasmid (m): sc-36632-SH, TDAG51 shRNA (h) Lentiviral Particles: sc-36631-V and TDAG51 shRNA (m) Lentiviral Particles: sc-36632-V.

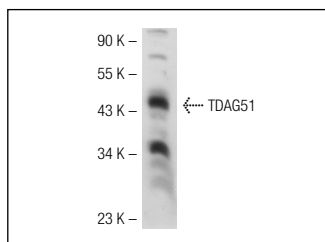
Molecular Weight of TDAG51: 44 kDa.

Positive Controls: human pancreas extract: sc-363770, Hep G2 cell lysate: sc-2227 or mouse brain extract: sc-2253.

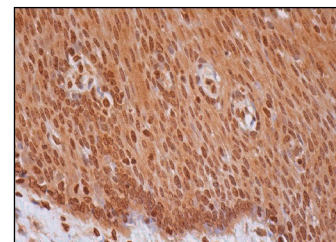
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



TDAG51 (H-150): sc-28242. Western blot analysis of TDAG51 expression in Hep G2 whole cell lysate.



TDAG51 (H-150): sc-28242. Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing cytoplasmic and nuclear staining of squamous epithelial cells.

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.



Try **TDAG51 (RN-6E2): sc-23866**, our highly recommended monoclonal alternative to TDAG51 (H-150). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **TDAG51 (RN-6E2): sc-23866**.