

TDAG51 (m): 293T Lysate: sc-123964

BACKGROUND

Cytotoxic T lymphocyte (CTL)-mediated cytotoxicity constitutes an important component of specific effector mechanisms in immunosurveillance against virus-infected or -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

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- Podack, E.R., et al. 1991. A central role of perforin in cytolysis? *Annu. Rev. Immunol.* 9: 129-157.
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- Drappa, J., et al. 1993. The FAS protein is expressed at high levels on CD4⁺CD8⁺ thymocytes and activated mature lymphocytes in normal mice but not in the lupus-prone strain, MRL LPR/LPR. *Proc. Natl. Acad. Sci. USA* 90: 10340-10344.
- Hanabuchi, S., et al. 1994. FAS and its ligand in a general mechanism of T cell-mediated cytotoxicity. *Proc. Natl. Acad. Sci. USA* 91: 4930-4934.
- Park, C.G., et al. 1996. A novel gene product that couples TCR signaling to Fas (CD95) expression in activation-induced cell death. *Immunity* 4: 583-591.

CHROMOSOMAL LOCATION

Genetic locus: Phlda1 (mouse) mapping to 10 D1.

PRODUCT

TDAG51 (m): 293T Lysate represents a lysate of mouse TDAG51 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

TDAG51 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive TDAG51 antibodies. Recommended use: 10-20 µl per lane.

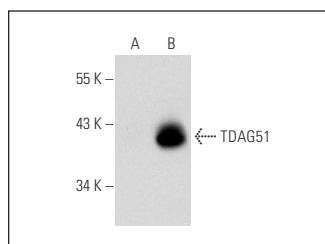
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TDAG51 (RN-6E2): sc-23866 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse TDAG51 expression in TDAG51 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



TDAG51 (RN-6E2): sc-23866. Western blot analysis of TDAG51 expression in non-transfected: sc-117752 (A) and mouse TDAG51 transfected: sc-123964 (B) 293T whole cell lysates.

RESEARCH USE

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