SANTA CRUZ BIOTECHNOLOGY, INC.

GITRL (T-15): sc-5762

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

GITRL (glucocorticoid-induced TNF-related ligand), a polypeptide encoded by a human umbilical endothelial cell cDNA, is a member of the TNF (tumor necrosis factor) superfamily. GITRL has a type 2 transmembrane topology that is characteristic of the TNF family. The TNF superfamilies regulate diverse biological functions, including cell proliferation, differentiation and survival. GITRL is found on vascular endothelial cells and in several peripheral tissues (small intestine, ovary, testis and kidney), where it may modulate T lymphocyte survival. The GITR receptor recognizes GITRL and the two interact to regulate NFκB activation. The ligand-receptor pair of GITRL-GITR protects cells against AICD (activation-induced cell death).

REFERENCES

1. Smith, C.A., et al. 1994. The TNF receptor superfamily of cellular and viral proteins: activation, costimulation, and death. Cell 76: 959-962.
2. Gruss, H.J., et al. 1995. Tumor necrosis factor ligand superfamily: involvement in the pathology of malignant lymphomas. Blood 85: 3378-3404.
3. Nocentini, G., et al. 1997. A new member of the tumor necrosis factor/nerve growth factor receptor family inhibits T cell receptor-induced apoptosis. Proc. Natl. Acad. Sci. USA 94: 6216-6221.
4. Ashkenazi, A. and Dixit, V.M. 1998. Death receptors: signaling and modulation. Science 281: 1305-1308.
5. Gurney, A.L., et al. 1999. Identification of a new member of the tumor necrosis factor family and its receptor, a human ortholog of mouse GITR. Curr. Biol. 9: 215-218.

CHROMOSOMAL LOCATION

Genetic locus: TNFSF18 (human) mapping to 1q25.1.

SOURCE

GITRL (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GITRL 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-5762 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

GITRL (T-15) is recommended for detection of GITRL of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

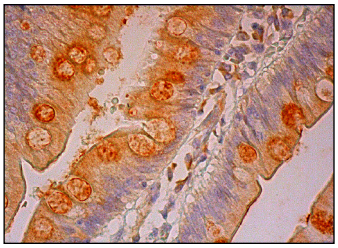
Suitable for use as control antibody for GITRL siRNA (h): sc-39827, GITRL shRNA Plasmid (h): sc-39827-SH and GITRL shRNA (h) Lentiviral Particles: sc-39827-V.

Molecular Weight of GITRL: 20 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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



GITRL (T-15): sc-5762. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

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