# GITRL (M-173): sc-66907



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 receptor that recognizes GITRL is GITR and the two interact to regulate NF $\kappa$ B activation. The ligand-receptor pair of GITRL-GITR protects cells against AICD (activation-induced cell death).

# **REFERENCES**

- Smith, C.A., Farrah, T. and Goodwin, R.G. 1994. The TNF receptor superfamily of cellular and viral proteins: activation, costimulation, and death. Cell 76: 959-962.
- Gruss, H.J. and Dower, S.K. 1995. Tumor necrosis factor ligand superfamily: involvement in the pathology of malignant lymphomas. Blood 85: 3378-3404.
- Nocentini, G., Giunchi, L., Ronchetti, S., Krausz, L.T., Bartoli, A., Moraca, R., Migliorati, G. and Riccardi, C. 1997. A new member of the tumor necrosis factor/nerve growth factor receptor family inhibits T cell receptorinduced apoptosis. Proc. Natl. Acad. Sci. USA 94: 6216-6221.
- Ashkenazi, A. and Dixit, V.M. 1998. Death receptors: signaling and modulation. Science 281: 1305-1308.
- Gurney, A.L., Marsters, S.A., Huang, R.M., Pitti, R.M., Mark, D.T., Baldwin, D.T., Gray, A.M., Dowd, A.D., Brush, A.D., Heldens, A.D., Schow, A.D., Goddard, A.D., Wood, W.I., Baker, K.P., Godowski, P.J. and Ashkenazi, A. 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 1q23; Tnfrsf18 (mouse) mapping to 4 E.

## **SOURCE**

GITRL (M-173) is a rabbit polyclonal antibody raised against amino acids 1-173 representing full length GITRL of mouse origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **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 (M-173) is recommended for detection of GITRL of mouse and, to a lesser extent, rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2  $\mu$ g per 100–500  $\mu$ g 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).

Suitable for use as control antibody for GITRL siRNA (m): sc-72135.

## **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.

#### **RESEARCH USE**

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com