

**GITRL Antibody**  
**Catalog # ASC10348****Specification**

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**GITRL Antibody - Product Information**

Application	WB, ICC
Primary Accession	<a href="#">Q9UNG2</a>
Other Accession	<a href="#">Q9UNG2</a> , <a href="#">13124621</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	GITRL antibody can be used for the detection of GITRL by Western blot at 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL.

**GITRL Antibody - Additional Information**

Gene ID 8995

**Other Names**

GITRL Antibody: TL6, AITRL, GITRL, hGITRL, TL6, UNQ149/PRO175, Tumor necrosis factor ligand superfamily member 18, Activation-inducible TNF-related ligand, tumor necrosis factor (ligand) superfamily, member 18

**Target/Specificity**

TNFSF18;

**Reconstitution & Storage**

GITRL antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

GITRL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**GITRL Antibody - Protein Information****Name** TNFSF18 ([HGNC:11932](#))**Synonyms** AITRL, GITRL, TL6**Function**

Cytokine that binds to TNFRSF18/AITR/GITR. Regulates T-cell responses. Can function as costimulator and lower the threshold for T- cell activation and T-cell proliferation. Important for interactions between activated T-lymphocytes and endothelial cells. Mediates activation of NF-kappa-B. Triggers increased phosphorylation of STAT1 and up-regulates expression of VCAM1

and ICAM1 (PubMed:<a href="http://www.uniprot.org/citations/23892569" target="\_blank">23892569</a>). Promotes leukocyte adhesion to endothelial cells (PubMed:<a href="http://www.uniprot.org/citations/23892569" target="\_blank">23892569</a>). Regulates migration of monocytes from the splenic reservoir to sites of inflammation (By similarity).

#### Cellular Location

Cell membrane; Single-pass type II membrane protein

#### Tissue Location

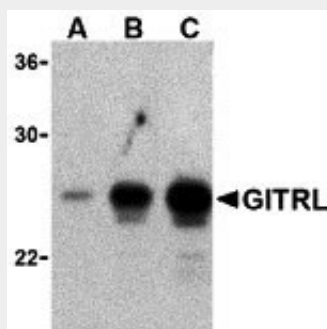
Expressed at high levels in the small intestine, ovary, testis, kidney and endothelial cells

### GITRL Antibody - Protocols

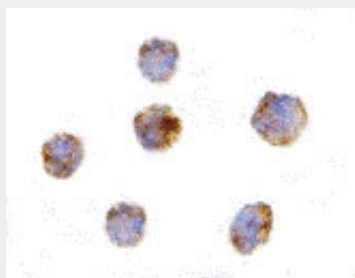
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### GITRL Antibody - Images



Western blot analysis of (A) 5 ng, (B) 25 ng, and (C) 50 ng of purified recombinant GITRL with GITRL antibody at 1 µg/mL.



Immunocytochemistry of GITRL in THP-1 cells with GITRL antibody at 10 µg/mL.

### GITRL Antibody - Background

GITRL Antibody: The tumor necrosis factor (TNF) and TNF receptor (TNFR) gene superfamilies regulate numerous biological functions including cell proliferation, differentiation, and survival

through regulating the activation of the transcription factor NF- $\kappa$ B and various mitogen-activated protein kinases. The glucocorticoid-induced tumor necrosis factor receptor (GITR) is an emerging member of this family that is expressed on CD4<sup>+</sup> CD25<sup>+</sup> regulatory T cells and appears to have crucial immune regulation functions. Its ligand GITRL is expressed in endothelial and antigen-presenting cells and can activate NF- $\kappa$ B, induce both pro- and anti-apoptotic effects, inhibit the suppressive activity of regulatory T cells, and co-stimulate responder T cells through GITR. Dominant negative forms of NIK and TRAF2 expressed in transfected 293 cells substantially inhibited NF- $\kappa$ B activation, suggesting that the GITRL-GITR pathway involves both NIK and TRAF2.

#### **GITRL Antibody - References**

- Gaur U, Aggarwal BB. Regulation of proliferation, survival and apoptosis by members of the TNF superfamily. *Biochem. Pharmacol.* 2003; 66:1403-8.
- Ronchetti S, Nocentini G, Riccardi C, et al. Role of GITR in activation response of T lymphocytes. *Blood* 2002; 100:350-2.
- Shimizu J, Yamakai S, Takahashi T, et al. Stimulation of CD25(+) CD4(+) regulatory T cells through GITR breaks immunological self- tolerance. *Nat. Immunol.* 2002;3:135-42.
- Gurney AL, Marsters SA, Huang A, et al. Identification of a new member of the tumor necrosis factor family and its receptor, a human ortholog of mouse GITR. *Curr. Biol.* 1999; 9:215-218.