

GITRL Antibody
Catalog # ASC10348

Specification

GITRL Antibody - Product Information

Application	WB, ICC
Primary Accession	O9UNG2
Other Accession	O9UNG2 , 13124621
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:23892569). Promotes leukocyte adhesion to endothelial cells (PubMed:23892569). 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

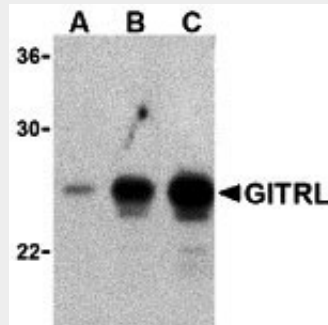
Expressed at high levels in the small intestine, ovary, testis, kidney and endothelial cells

GITRL Antibody - Protocols

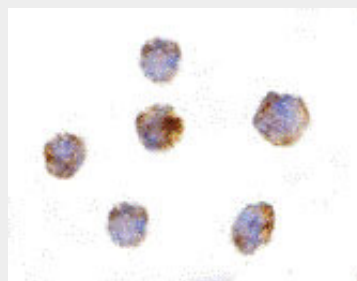
Provided below are standard protocols that you may find useful for product applications.

- [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 ITRL 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- κ 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⁺ CD25⁺ 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- κ 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- κ 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.