



# GITR (DTA-1): sc-81718

## BACKGROUND

The tumor necrosis factor receptor (TNFR) superfamily represents a growing family of type I transmembrane glycoproteins that are involved in various cellular functions, including proliferation, differentiation and programmed cell death. These proteins share homology for cysteine-rich repeats in the extracellular ligand binding domain and an intracellular death domain. Members of the TNFR superfamily transmit signals through protein-protein interactions, and these signals can lead to the activation of either the caspase and Jun kinase pathways, which promote cell death, or the NF $\kappa$ B pathway, which results in cell survival. The glucocorticoid-induced tumor necrosis factor receptor family-related protein (GITR) is a member of the TNFR superfamily that is preferentially expressed in normal T lymphocytes from thymus, spleen and lymph nodes. GITR shares similarity with Ox40, 4-1BB and CD27 and is thought to inhibit T cell receptor-mediated cell death through the activation of the NF $\kappa$ B signaling pathway.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: *Tnfrsf18* (mouse) mapping to 4E.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## SOURCE

GITR (DTA-1) is a rat monoclonal antibody raised against a CD25 and CD4 positive T cell line of mouse origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2b</sub> in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as phycoerythrin (sc-81718 PE) or fluorescein (sc-81718 FITC) conjugates for flow cytometry, 100 tests.

## APPLICATIONS

GITR (DTA-1) is recommended for detection of GITR of mouse origin by immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells).

Molecular Weight of GITR: 25 kDa.

Suitable for use as control antibody for GITR siRNA (m): sc-145408, GITR shRNA Plasmid (m): sc-145408-SH and GITR shRNA (m) Lentiviral Particles: sc-145408-V.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.