

Anti-mGITR-mIgG2a InvivoFit™

DTA-1-derived recombinant mouse monoclonal antibody against murine GITR

Catalog code: mgitr-mab10-1, mgitr-mab10-10

<https://www.invivogen.com/anti-mgitr-migg2a-invivofit>

For research use only

Version 24C12-AK

PRODUCT INFORMATION

Contents:

Anti-mGITR-mIgG2a InvivoFit™, purified monoclonal antibody (mAb), provided azide-free and lyophilized. It is available in two pack sizes:

- 1 mg: mgitr-mab10-1
- 10 mg: mgitr-mab10-10

Target: Murine GITR (Glucocorticoid-Induced TNFR-Related protein)

Clone: DTA-1

Sequence: ~65 % of mouse origin (constant region)

Source: Chinese hamster ovary (CHO) cells

Isotype: Murine IgG2a (mIgG2a), lambda

Purification: Affinity chromatography with protein A

Formulation: 0.2 µm filtered solution in a sodium phosphate buffer with 5 % saccharose

Tested application: ELISA

Antibody resuspension (2 mg/ml)

Note: Ensure you see the lyophilized pellet before resuspension.

Resuspend Anti-mGITR-mIgG2a InvivoFit™ with sterile water:

Add 500 µl to 1 mg or 5 ml to 10 mg

Storage and stability

- Product is shipped at room temperature. Store lyophilized antibody at -20 °C. Lyophilized product is stable for at least 1 year.
- Reconstituted antibody is stable for 1 month at 4 °C and for 1 year at -20 °C. Avoid repeated freeze-thaw cycles.

Quality control

- Binding of Anti-mGITR-mIgG2a InvivoFit™ to mGITR has been confirmed using ELISA.
- The complete sequence of the antibody construct has been verified.
- <5% aggregates (confirmed by size exclusion chromatography).
- Anti-mGITR-mIgG2a InvivoFit™ is filter-sterilized (0.2 µm) and its endotoxin level is <1 EU/mg (determined by the LAL assay).

BACKGROUND

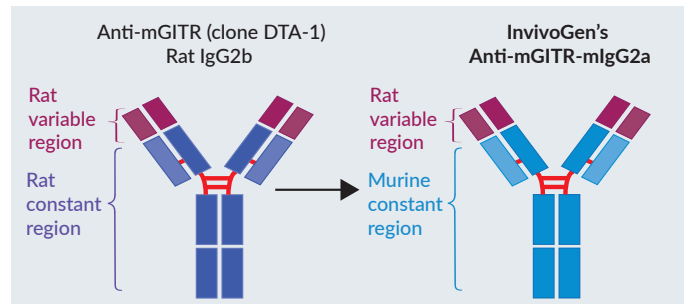
GITR (Glucocorticoid-Induced TNFR-Related protein) is a co-stimulatory immune checkpoint protein found on a variety of immune cells including T cells, natural killer (NK) cells and some myeloid cells. Interaction of GITR with its ligand GITRL can modulate the tumor pathogenesis, inflammation and autoimmune diseases [1]. The DTA-1-derived agonist mAb is commonly used to trigger mGITR-mediated cellular activities *in vivo* [2]. It increases T cell and NK cell activity, cytotoxicity, and degranulation *in vivo* [1]. It shows strong antitumor efficacy by modulating both effector (Teffs) and regulatory (Tregs) T cells during tumor treatment [1-2]. The Anti-mGITR mAb efficacy is moderate on its own, thus it is more often used in combination with other immune checkpoint mAbs (e.g. CTLA4, PD-1) [1].

DESCRIPTION

Anti-mGITR-mIgG2a InvivoFit™ is a recombinant mAb specific against mGITR. The rat-derived constant region was replaced by an engineered murine constant region, making the mAb ~65% of murine origin. Anti-mGITR-mIgG2a InvivoFit™ now consists of the variable region of rat anti-mGITR mAb (clone DTA-1) and the engineered murine IgG2a constant region. This antibody has been selected for its ability to efficiently bind to mGITR. It is generated by recombinant DNA technology, produced in CHO cells and purified by affinity chromatography.

APPLICATIONS

Anti-mGITR-mIgG2a InvivoFit™ is an agonistic antibody, which binds and triggers mGITR-mediated cellular activities. InvivoFit™ is a high-quality standard specifically adapted for *in vivo* studies. This product is filter-sterilized (0.2 µm) and filled under strict aseptic conditions in a clean room.



InvivoGen's engineered murinized Anti-mGITR-mIgG2a InvivoFit™ antibody

1. Belmar N.A. *et al.*, 2017. Murinization and H chain isotype matching of Anti-GITR antibody DTA-1 reduces immunogenicity-mediated anaphylaxis in C57BL/6 mice. *J Immunol.* 198:4502-4512. 2. Tian J, *et al.*, 2020. The Role of GITR/GITRL Interaction in Autoimmune Diseases. *Front Immunol.*;11:588682.

RELATED PRODUCTS

Product	Catalog Code
Anti-β-Gal-mIgG2a InvivoFit™	bgal-mab10-1
Anti-mCTLA4-mIgG2a InvivoFit™	mctla4-mab10-1
Anti-mPD-1-mIgG1e3 InvivoFit™	mpd1-mab15-1

TECHNICAL SUPPORT

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