

Anti-mIL-13-mIgG1 InvivoFit™

Neutralizing recombinant monoclonal mouse antibody against mouse interleukin 13

Catalog code: mil13-mab9-1

<https://www.invivogen.com/anti-mil13-igg>

For research use only

Version 22J12-AK

PRODUCT INFORMATION

Contents: 1 mg purified anti-mIL-13-mIgG1 InvivoFit™ monoclonal antibody (mAb), provided azide-free and lyophilized.

Target: Murine IL-13 (mIL-13)

Specificity: No cross-reactivity with human IL-13

Clone: 8H8

Source: Chinese hamster ovary (CHO) cells

Isotype: Mouse IgG1, kappa

Purification: Affinity chromatography with protein A

Formulation: 0.2 µm filtered solution in a sodium phosphate buffer with 5% saccharose and 0.25% Polysorbate 80*

Tested applications: Neutralization & blocking

Antibody resuspension (2 mg/ml)

Note: Ensure you see the lyophilized pellet before resuspension.

Resuspend Anti-mIL-13-mIgG1 InvivoFit™ with sterile water:

Add 500 µl of sterile water per 1 mg vial.

Storage and stability

- Product is shipped at room temperature. Upon receipt, 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-mIL-13-mIgG1 InvivoFit™ to mIL-13 has been confirmed by cellular assay.

- The complete sequence of this antibody has been verified.

- <5% aggregates (confirmed by size exclusion chromatography).

- Anti-mIL-13-mIgG1 InvivoFit™ is filter-sterilized (0.2 µm) and its endotoxin level is <1 EU/mg (determined by the LAL assay).

BACKGROUND

Interleukin 13 (IL-13) is a cytokine that plays an important role in regulating inflammation and immune responses¹. It is produced mainly by activated T cells. IL-13 exerts its anti-inflammatory effects by inhibiting the production of pro-inflammatory cytokines, such as TNF- α . Interestingly, both IL-4 and IL-13 can bind to the same receptor complex, IL-13 receptor (IL-13R), which is composed of two subunits IL-4 α and IL-13R α ². The binding of IL-4 or IL-13 to IL-13R initiates a signaling cascade involving then activation of receptor-associated Janus kinases (JAK1 and Tyk2) and the nuclear translocation of STAT6. This ultimately leads to the induction of gene expression by IL-13³.

TECHNICAL SUPPORT

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InvivoGen Asia: +852 3622-3480

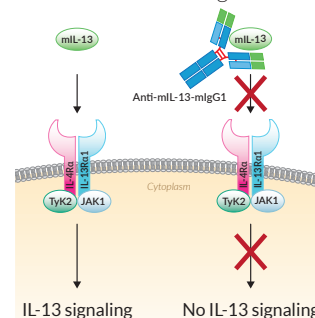
E-mail: info@invivogen.com

DESCRIPTION

Anti-mIL-13-mIgG1 InvivoFit™ is a recombinant monoclonal antibody (mAb) specific against mIL-13. Its sequence is 100% murine (constant and variable regions), as the original clone (clone H8H) was raised in mice using a proprietary method. This feature ensures high antibody performance and overcomes immunogenic events, especially upon repeated injections *in vivo*. Anti-mIL-13-mIgG1 InvivoFit™ has been selected for its ability to efficiently neutralize the biological activity of mIL-13. It is generated by recombinant DNA technology, produced in CHO cells and purified by affinity chromatography.

APPLICATIONS

Anti-mIL-13-mIgG1 InvivoFit™ is a neutralizing antibody, which blocks mIL-13-induced cellular activation. 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. This mAb is also available as a standard grade for *in vitro* experiments.



Neutralization activity of Anti-mIL-13-mIgG1 InvivoFit™

1. Kasaian M.T. et al., 2013. An IL-4/IL-13 dual antagonist reduces lung inflammation, airway hyperresponsiveness, and IgE production in mice. *Am J Respir Cell Mol Biol*.49(1):37-46.
2. David M. et al., 2003. Functional characterization of IL-13 receptor α 2 gene promoter: a critical role of the transcription factor STAT6 for regulated expression. *Oncogene* 22, 3386-94.
3. Dickensheets H.L. et al., 1999. Interferons inhibit activation of STAT6 by interleukin 4 in human monocytes by inducing SOCS-1 gene expression. *PNAS*. 96(19):10800-5.

RELATED PRODUCTS

Product	Cat. Code
Anti-mIL-13-mIgG1	mil13-mab9-02
Anti- β -Gal-mIgG1 InvivoFit™*	bgal-mab9-1
HEK-Blue™ IL-4/IL-13 Cells	hkb-il413
QUANTI-Blue™ Solution	rep-qbs

* *Optional:* The control mAb Anti- β -Gal-mIgG1 InvivoFit™ is provided without the addition of Polysorbate 80 (Tween® 80). If needed, add 0.25% Polysorbate 80 after resuspension.