

Anti-mCD25-7D4-mIgG2a InvivoFit™

7D4-derived recombinant monoclonal antibody against murine CD25

Catalog code: mcd25c2-mab10-1, mcd25c2-mab10-10

<https://www.invivogen.com/anti-mcd25-migg2a-invivofit>

For research use only, not for diagnostic or therapeutic use

Version 22G12-AK

PRODUCT INFORMATION

Contents:

Anti-mCD25-7D4-mIgG2a InvivoFit™, purified monoclonal antibody (mAb), provided azide-free and lyophilized. It is available in two pack sizes: • 1 mg • 10 mg

Target: Murine CD25 (aka IL-2R alpha)

Clone: 7D4-derived

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

Source: Chinese hamster ovary (CHO) cells

Isotype: Murine IgG2a (mIgG2a)

Light chain type: Kappa

Purification: Affinity chromatography with protein A

Formulation: 0.2 µm filtered solution in 150 mM sodium chloride, 20 mM sodium phosphate buffer with 5% saccharose

Administration: Suitable for parenteral delivery in mice

Applications: ELISA; Flow cytometry; *in vivo* depletion

Antibody resuspension (2 mg/ml)

Note: Ensure you see the lyophilized pellet before resuspension.

Resuspend Anti-mCD25-7D4-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

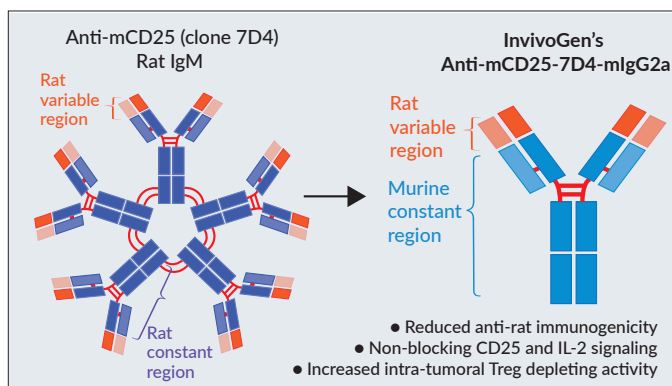
- Antibody binding has been validated by ELISA using a coated mouse CD25 protein.
- The complete sequence of the antibody construct has been verified.
- <5% aggregates (confirmed by size exclusion chromatography).
- Anti-mCD25-7D4-mIgG2a InvivoFit™ is filter-sterilized (0.2 µm) and its endotoxin level is <1 EU/mg (determined by the LAL assay).

BACKGROUND

The cluster of differentiation 25 (CD25, aka IL-2RA) in association with CD122 and CD132, forms the high-affinity cell-surface receptor for the IL-2 cytokine (IL-2R). CD25 is constitutively expressed at high levels by regulatory T (Treg) cells and only transiently at low levels by effector T (Teff) cells upon activation¹. While Teff cell function is augmented by IL-2 signaling, Treg cells absolutely require this signal for survival. Treg cells have been within the scope of clinical use to treat immunological diseases, including auto-immune disorders and cancer².

DESCRIPTION

Anti-mCD25-7D4-mIgG2a InvivoFit™ is an anti-mCD25 mAb featuring the variable region of the previously described rat IgM clone 7D4³ and a murinized IgG2a constant region. 7D4, when turned into mIgG2a mAb mediates *in vivo* depletion of Tregs without blocking CD25 (IL-2 pathway) on effector T cells⁴. Moreover, this antibody demonstrates superior T cell activation and tumor control against established mouse tumors⁴. This may be explained by the fact that Treg depletion contributes to increase available IL-2 locally, supporting effector T cell function⁴. Anti-mCD25-7D4-mIgG2a InvivoFit™ is produced in Chinese hamster ovary (CHO) cells, purified by affinity chromatography with protein A.



1. Damoiseaux J., 2020. The IL-2 – IL-2 receptor pathway in health and disease: The role of the soluble IL-2 receptor. *Clinical Immunol.* 218:108515.
2. Bayati F. *et al.*, 2021. The Therapeutic Potential of Regulatory T Cells: Challenges and Opportunities. *Frontiers in Immunol.* 11:3455.
3. Malek T.R., *et al.*, 1983. Identification and initial characterization of a rat monoclonal antibody reactive with the murine interleukin 2 receptor-ligand complex. *PNAS* 80(18):5694.
4. Solomon I. *et al.*, 2020. CD25-Treg-depleting antibodies preserving IL-2 signaling on effector T cells enhance effector activation and antitumor immunity. *Nat. Cancer* 1(12):1153.

RELATED PRODUCTS

Product	Catalog Code
Mouse IgG2a control	bgal-mab10-1
Anti-mCD25-PC-mIgG2a InvivoFit™	mcd25c1-mab10-1
Anti-mCD4-mIgG2a InvivoFit™	mcd4-mab10-1
Anti-mCD8-mIgG2a InvivoFit™	mcd8-mab10-1
Anti-mPD1-mIgG1e3 InvivoFit™	mpd1-mab15-1

For more information visit <https://www.invivogen.com/mouse-anti-mouse-mabs>.

TECHNICAL SUPPORT

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