

# Anti- $\beta$ -Gal-mIgG1 InvivoFit™

Mouse IgG1 monoclonal antibody against  $\beta$ -galactosidase; Isotype control

Catalog code: bgal-mab9-1, bgal-mab9-10

<https://www.invivogen.com/anti-beta-gal-migg1>

For research use only

Version 22J17-AK

## PRODUCT INFORMATION

### Contents:

Anti- $\beta$ -Gal-mIgG1 InvivoFit™, provided azide-free and lyophilized, is a purified monoclonal antibody (mAb). It is available in two pack sizes:

- 1 mg
- 10 mg

**Target:** E. coli  $\beta$ -galactosidase ( $\beta$ -Gal)

**Species reactivity:** Does not react with murine proteins

**Source:** Chinese hamster ovary (CHO) cells

**Sequence:** ~100% murine (constant region and variable region)

**Isotype:** Murine IgG1

**Light chain type:** Kappa

**Purification:** By affinity chromatography with protein A

**Formulation:** 0.2  $\mu$ m filtered solution in a sodium phosphate buffer with 5% saccharose

**Administration:** Suitable for parenteral delivery in mice

**Tested applications:** Flow cytometry and ELISA

### Antibody resuspension (2 mg/ml)

*Note:* Ensure you see the lyophilized pellet before resuspension.

Resuspend Anti- $\beta$ -Gal-mIgG1 InvivoFit™ with sterile water:

Add 500  $\mu$ l of sterile water to 1 mg per vial

### 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 when stored at 4°C and for 1 year when aliquoted and stored at -20°C. Avoid repeated freeze-thaw cycles.

### Quality control

- Functionality of Anti- $\beta$ -Gal-mIgG1 InvivoFit™ has been tested using flow cytometry and ELISA.
- The complete sequence of this antibody has been verified.
- <5% aggregates (confirmed by size exclusion chromatography).
- Anti- $\beta$ -Gal-mIgG1 InvivoFit™ is filter-sterilized (0.2  $\mu$ m) and its endotoxin level is <1 EU/mg of the protein (determined by the LAL assay).

## MOUSE ANTI-MOUSE MABS

InvivoGen offers a collection of InvivoFit™ recombinant mouse anti-mouse mAbs specifically adapted for *in vivo* studies. This collection includes mAbs targeting pro-inflammatory cytokines such as IL-1 $\beta$ . For more information visit [www.invivogen.com/mouse-anti-mouse-mabs](https://www.invivogen.com/mouse-anti-mouse-mabs). For your research, InvivoGen provides anti- $\beta$ -Gal isotype controls, comprising the variable region of a mouse monoclonal antibody targeting  $\beta$ -Gal and the constant region of either the engineered mouse IgG1e3 isotype or the native mouse IgG1 and IgG2a isotype. These isotypes differ in their effector functions, such as antibody-dependent cellular cytotoxicity (ADCC), antibody-dependent cell phagocytosis (ADCP), and complement-dependent cytotoxicity (CDC) as presented in the table below.

Effector function	mIgG1	mIgG1e3	mIgG2a
ADCC	+/-	-	++
ADCP	+	-	+++
CDC	-	-	++

## DESCRIPTION

Anti- $\beta$ -Gal-mIgG1 InvivoFit™ is a recombinant mAb comprising the variable region of the hybridoma-derived mAb Mouse IgG2a control (clone T9C6) that targets *E. coli*  $\beta$ -Gal. This mAb does not react with any murine proteins and displays low ADCC and no CDC effector functions<sup>1</sup>. Anti- $\beta$ -Gal-mIgG1 InvivoFit™ is provided as an isotype control for use with InvivoGen's IgG1 antibodies in the mouse anti-mouse mAbs collection. It has been produced in CHO cells and purified by affinity chromatography with protein A.

1. Baudino L. et al., 2008. Crucial role of aspartic acid at position 265 in the CH2 domain for murine IgG2a and IgG2b Fc-associated effector functions. J Immunol. 181(9):6664-9.

## RELATED PRODUCTS

Product	Cat.Code
Anti-mIL-1 $\beta$ -mIgG1	mil1b-mab9-02
Anti-mIL-13-mIgG1	mil13-mab9-02

## TECHNICAL SUPPORT

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