

Anti- β -Gal-mIgG2a InvivoFit™

Mouse IgG2a monoclonal antibody against β -galactosidase; Isotype control

Catalog code: bgal-mab10-1, bgal-mab10-10, bgal-mab10-50

<https://www.invivogen.com/anti-beta-gal-migg2a>

For research use only

Version 22H12-AK

PRODUCT INFORMATION

Contents:

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

- 1 mg
- 10 mg
- 50 mg (5 x 10 mg)

Target: E. coli β -galactosidase (β -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 IgG2a

Light chain type: Kappa

Purification: By affinity chromatography with protein A

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

Administration: Suitable for parenteral delivery in mice

Tested applications: Flow cytometry and ELISA

Antibody resuspension

Note: Ensure you see the lyophilized pellet before resuspension.

Add 500 μ l of sterile water to 1 mg of Anti- β -Gal-mIgG2a InvivoFit™ to obtain a concentration of 2 mg/ml.

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

- Absence of binding of Anti- β -Gal-mIgG2a InvivoFit™ to mouse cell lines has been tested using flow cytometry.
- The complete sequence of this antibody has been verified.
- <5% aggregates (confirmed by size exclusion chromatography).
- Anti- β -Gal-mIgG2a InvivoFit™ is filter-sterilized (0.2 μ 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 immune checkpoints such as CTLR4. For more information visit www.invivogen.com/mouse-anti-mouse-mabs.

For your research, InvivoGen provides anti- β -Gal isotype controls, comprising the variable region of a mouse monoclonal antibody targeting β -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- β -Gal-mIgG2a InvivoFit™ is a recombinant mAb comprising the variable region of the hybridoma-derived mAb Mouse IgG2a Control (clone: T9C6) that targets E. coli β -galactosidase (β -Gal). This mAb does not react with murine proteins. Of note, Mouse IgG2a Control was generated by DNA immunization with a plasmid expressing the β -Gal gene in Swiss mice.

Anti- β -Gal-mIgG2a InvivoFit™ features the murine IgG2a isotype, a major immunoglobulin present in serum. This isotype displays very high ADCP, high ADCC and high CDC¹. Anti- β -Gal-mIgG2a InvivoFit™ is provided as an isotype control for use with InvivoGen's IgG2a antibodies in the mouse anti-mouse mAbs collection (see above). It has been produced in CHO cells and purified by affinity chromatography.

1. Nimmerjahn F. et al., 2005. Fc γ RIV: a novel FcR with distinct IgG subclass specificity. *Immunity*. 2005 Jul;23(1):41-51

RELATED PRODUCTS

Product	Cat.Code
Anti-mCTRL4-mIgG2a InvivoFit™	mctla4-mab10-1
Anti-gp75-mIgG2a InvivoFit™	mgp75-mab10-1
Anti-mCD3-mIgG2a InvivoFit™	mcd3-mab10-1
Anti-mCD20-mIgG2a InvivoFit™	mcd20-mab10-1

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