**PRODUCT INFORMATION**

Contents:
Anti-β-Gal-mIgG1e3 InvivoFit™, provided azide-free and lyophilized, is a purified monoclonal antibody (mAb). It is available in two pack sizes:
- 1 mg
- 10 x 1 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 IgG1e3 (D265A mutation; no effector function)
Light chain type: Kappa
Purification: By affinity chromatography with protein G
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
Tested applications: Flow cytometry and ELISA

Antibody resuspension
*Note: Ensure you see the lyophilized pellet before resuspension.*
Add 500 µl of sterile water to 1 mg of Anti-β-Gal-mIgG1e3 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-mIgG1e3 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-mIgG1e3 InvivoFit™ is guaranteed sterile 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 PD-1. For more information visit [www.invivogen.com/mouse-anti-mouse-mabs](http://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 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.

<table>
<thead>
<tr>
<th>Effector function</th>
<th>Mouse IgG1e3</th>
<th>Mouse IgG2a</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADCC</td>
<td>-</td>
<td>++</td>
</tr>
<tr>
<td>ADCP</td>
<td>-</td>
<td>+++</td>
</tr>
<tr>
<td>CDC</td>
<td>-</td>
<td>++</td>
</tr>
</tbody>
</table>

**DESCRIPTION**
Anti-β-Gal-mIgG1e3 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-mIgG1e3 InvivoFit™ features the engineered murine IgG1e3 that contains a point mutation D265A (a replacement of aspartic acid by alanine at position 265), resulting in the complete loss of cytolytic effector functions (ADCC, ADCP, and CDC)\(^1\,^2\).
Anti-β-Gal-mIgG1e3 InvivoFit™ is provided as an isotype control for use with InvivoGen’s IgG1e3 antibodies in the mouse anti-mouse mAbs collection (see above). This mAb has been produced in CHO cells and purified by affinity chromatography with protein G.


**RELATED PRODUCTS**

<table>
<thead>
<tr>
<th>Product</th>
<th>Catalog Code</th>
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</thead>
<tbody>
<tr>
<td>Anti-mPD-1-mIgG1e3 InvivoFit™</td>
<td>mpd1-mab15-1</td>
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<tr>
<td>Anti-PD-L1-mIgG1e3 InvivoFit™</td>
<td>pdl1-mab15-1</td>
</tr>
<tr>
<td>Anti-β-Gal-mIgG2a InvivoFit™</td>
<td>bgal-mab10-1</td>
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<tr>
<td>Mouse IgG2a Control</td>
<td>mabg2a-ctrlm</td>
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</tbody>
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