

# Technical Data Sheet

## RecombiMAb anti-mouse 4-1BB (CD137) (LALA-PG)



**Attention:** Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at <https://bioxcell.com/terms-and-conditions>.

### Lot Specific Information

**Lot Number:** Lot Specific\*  
**Volume:** Lot Specific\*  
**Concentration:** Lot Specific\* (generally 4 to 11 mg/ml) \*  
**Total Protein:** Lot Specific\*

\*This information will be noted on the certificate of analysis that ships with this product.

### Product Information

**Catalog Number:** CP038  
**Clone:** LOB12.3-CP038  
**Isotype:** Mouse IgG2a,  $\kappa$   
**Recommended Isotype Control(s):** RecombiMAb mouse IgG2a (LALA-PG) isotype control, anti-hen egg lysozyme  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Mutations:** LALA-PG  
**Immunogen:** Mouse CD137 human Fc fusion protein  
**Reported Applications:** *in vivo* activation of 4-1BB\*  
\*Reported for the original rat IgG1 LOB12.3 antibody  
**Formulation:** PBS, pH 7.0  
Contains no stabilizers or preservatives  
**Endotoxin:** <1EU/mg (<0.001EU/ $\mu$ g)  
Determined by LAL gel clotting assay  
**Purity:** >95%  
Determined by SDS-PAGE  
**Sterility:** 0.2  $\mu$ m filtration  
**Production:** Purified from HEK293 cell supernatant in an animal-free facility  
**Purification:** Protein G  
**Aggregation:** <5%  
Determined by SEC  
**RRID:**  
**Molecular Weight:** 150 kDa

### Murine Pathogen Test Results

Mouse Norovirus: Negative, Mouse Parvovirus: Negative, Mouse Minute Virus: Negative, Mouse Hepatitis Virus: Negative, Reovirus Screen: Negative, Lymphocytic Choriomeningitis virus: Negative, Lactate Dehydrogenase-Elevating Virus: Negative, Mouse Rotavirus: Negative, Theiler's Murine Encephalomyelitis: Negative, Ectromelia/Mousepox Virus: Negative, Hantavirus: Negative, Polyoma Virus: Negative, Mouse Adenovirus: Negative, Sendai Virus: Negative, Mycoplasma Pulmonis: Negative, Pneumonia Virus of Mice: Negative, Mouse Cytomegalovirus: Negative, K Virus: Negative

### Description

The LOB12.3-CP038 monoclonal antibody is a chimeric version of the original LOB12.3 antibody. The variable domain sequences are identical to the original LOB12.3 but the constant region sequences have been switched from rat IgG1 to mouse IgG2a. The LOB12.3-CP038 antibody also contains a LALA-PG mutation in the Fc fragment rendering it unable to bind to endogenous Fc $\gamma$  receptors. The LOB12.3-CP038 antibody reacts with mouse 4-1BB, a TNF receptor superfamily member also known as CD137. 4-1BB is a 39 kDa transmembrane protein expressed by T lymphocytes, NK cells, dendritic

cells, granulocytes, and mast cells. Upon binding its ligand 4-1BBL, 4-1BB provides costimulatory signals to both CD4 and CD8 T cells through the activation of NF- $\kappa$ B, c-Jun and p38 downstream pathways. The importance of the 4-1BB pathway has been underscored in a number of diseases, including cancer. Agonistic anti-4-1BB antibodies have been reported to induce T cell mediated antitumor immunity. The LOB12.3 antibody is an agonistic antibody that has been shown to stimulate 4-1BB signaling and delay tumor growth in vivo when administered in combination with immune checkpoint inhibitors.

## Storage

Store at the stock concentration at 4°C. **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

## Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

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### Bio X Cell, LLC

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*Not for resale.*

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