Technical Data Sheet

RecombiMAb anti-mouse CD40L (CD154) (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:	**CP034**
Clone:	**MR-1-CP034**
Isotype:	Mouse IgG2a, κ
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:	Activated mouse Th1 clone D1.6
Reported Applications:	*in vivo* blocking of CD40/CD40L signaling* *in vitro* blocking of CD40/CD40L signaling* Western blot* *Reported for the original Armenian hamster IgG MR-1 antibody
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤0.5EU/mg (≤0.0005EU/μg) Determined by LAL gel clotting assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 μm 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 MR-1-CP034 monoclonal antibody is a chimeric version of the original MR-1 antibody. The variable domain sequences are identical to the original MR-1 but the constant region sequences have been switched from Armenian hamster IgG to mouse IgG2a. The MR-1-CP034 antibody also contains a LALA-PG mutation in the Fc fragment rendering it unable to bind to endogenous Fcγ receptors. The MR-1-CP034 antibody reacts with mouse CD154 also known as CD40 ligand. CD154

exists as a 39 kDa accessory molecule and belongs to the TNF superfamily of cytokines. CD154 is primarily expressed on the surface of activated CD4+ T lymphocytes but can also be expressed by platelets, mast cells, macrophages, basophils, NK cells, B lymphocytes, CD8+ T lymphocytes as well as non-hematopoietic cells including smooth muscle cells, endothelial cells, and epithelial cells. CD154 signals through CD40 and is thought to play a key role in T and B lymphocyte costimulation. The MR-1 monoclonal antibody has been reported to inhibit in vitro activation of B lymphocytes by blocking the binding of CD154 with CD40 on T helper cells as well as inhibit the formation of germinal centers and disrupt antigen-specific T cell responses. Additionally, the MR-1 antibody blocks interactions of T cells and antigen-presenting cells in vitro and blocks the development of experimental autoimmune disease in vivo.

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.

Application References

For a complete list of references, visit https://bioxcell.com/cp034?bxcs=9k1b3a#tab_references or scan the QR code below.

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