Technical Data Sheet

InVivoMAb anti-mouse CD40L (CD154)

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:	**BE0017-1**
Clone:	**MR-1**
Isotype:	Armenian hamster IgG
Recommended Isotype Control(s):	InVivoMAb polyclonal Armenian hamster IgG
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
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
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤1EU/mg (≤0.001EU/µg) Determined by LAL gel clotting assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 µm filtration
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein A
RRID:	AB_1107601
Molecular Weight:	150 kDa

Description

The MR-1 monoclonal 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

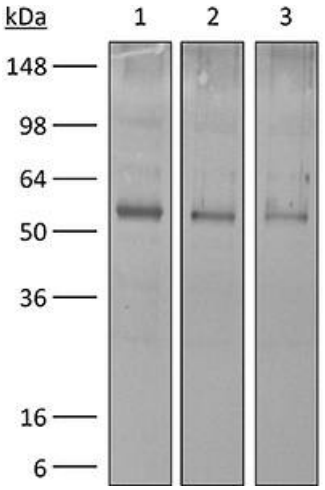
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/be0017-1?bxcs=9k1b3a#tab_references or scan the QR code below.

Binding Validation

Validation data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, e-mail technicalservice@bioxcell.com.



Lane 1 : 0.8 µg reduced purified mouse CD40L with Fc tag
Lane 2 : 0.4 µg reduced purified mouse CD40L with Fc tag
Lane 2 : 0.2 µg reduced purified mouse CD40L with Fc tag

Primary: biotinylated anti-mouse CD154 (CD40L) antibody (MR-1) at 8 µg/ml

Secondary: HRP labeled streptavidin 1:1000 dilution

Predicted band size : 50 kDa

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