# Technical Data Sheet

## RecombiMAb anti-mouse IL-10R (CD210)

**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

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|---|---|
| **Catalog Number:** | **CP073** |
| **Clone:** | **1B1.3A-CP073** |
| **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:** | Recombinant ligand-binding domain of mouse IL-10R |
| **Reported Applications:** | Flow Cytometry<br>Western blot<br>*in vitro* blocking of IL-10R signaling<br>*in vivo* blocking of IL-10/IL-10R signaling<br>*Reported for the original rat IgG1 1B1.3A antibody. For information on *in vivo* applications, please contact technicalservice@bioxcell.com |
| **Formulation:** | PBS, pH 7.0<br>Contains no stabilizers or preservatives |
| **Endotoxin:** | <1EU/mg (<0.001EU/µg)<br>Determined by LAL gel clotting assay |
| **Purity:** | >95%<br>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%<br>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 1B1.3A-CP073 monoclonal antibody is a recombinant, chimeric version of the original 1B1.3A antibody. The variable domain sequences are identical but the constant region sequences have been switched from Rat IgG1, κ to mouse IgG2a, κ

for use in murine models. Additionally, 1B1.3A-CP073 contains LALA-PG mutations in the heavy chain Fc fragment rendering it unable to bind endogenous murine FcγR or C1q to induce antibody-dependent, cell-mediated cytotoxicity (ADCC) or complement-dependent cytotoxicity (CDC). Antibodies with active Fc regions can engage immune cells via FcγRs, leading to the depletion of antigen expressing cells through mechanisms like ADCC or complement activation. Fc-silenced antibodies do not trigger these pathways and can block signaling without killing or depleting target cells. Using Fc-silent antibodies allows researchers to distinguish between the effects of receptor blockade and those of cell depletion or Fc-mediated immune activation. Additionally, species-matched chimeric antibodies demonstrate reduced immunogenicity and formation of anti-drug antibodies (ADAs) compared to xenogenic antibodies in animal models. The highly controlled sequence and lack of genetic drift in recombinant antibodies provide more reliable and reproducible results over hybridoma derived antibodies. 1B1.3A-CP073 monoclonal antibody reacts with mouse IL-10R (IL-10 receptor) also known as CD210. The IL-10R is a class II cytokine receptor and is expressed by a variety of cell types including thymocytes, T lymphocytes, B lymphocytes, NK cells, monocytes, and macrophages. Upon binding IL-10, IL-10R stimulation results in many pleiotropic effects in immunoregulation and inflammation. IL-10R downregulates the expression of pro-inflammatory cytokines, MHC class II antigens, and co-stimulatory molecules on macrophages. It also enhances B lymphocyte survival, proliferation, and antibody production. IL-10R signaling can block NF-κB activity and is involved in the regulation of the JAK-STAT signaling pathway. The 1B1.3A antibody is a neutralizing antibody and has been shown to block the binding of human IL-10, which cross-reacts with the mouse IL-10R. However, this clone does not recognize the human IL-10R.

## 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

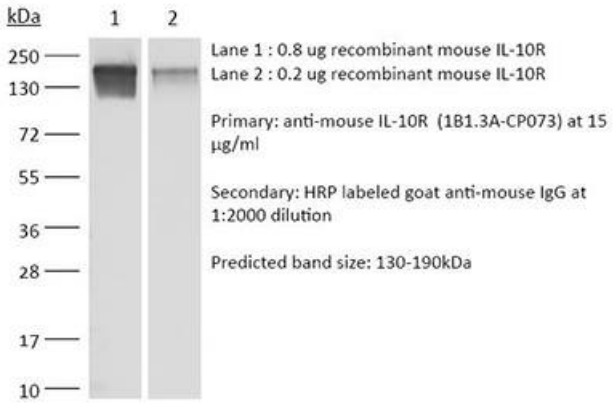
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

## Application References

For a complete list of references, visit https://bioxcell.com/cp073?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.

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