# Technical Data Sheet

## RecombiMAb anti-mouse CD19

**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:** | **CP118** |
| **Clone:** | **1D3-CP118** |
| **Isotype:** | Mouse IgG2a, κ |
| **Recommended Isotype Control(s):** | RecombiMAb mouse IgG2a isotype control, unknown specificity |
| **Recommended Dilution Buffer:** | InVivoPure pH 7.0 Dilution Buffer |
| **Immunogen:** | K562 cells expressing the extracellular domain of mouse CD19 |
| **Reported Applications:** | *in vivo* B cell depletion*<br>*in vivo* CD19 neutralization*<br>*in vitro* B cell negative selection*<br>Flow cytometry*<br>*Reported for the original rat IgG2a 1D3 antibody |
| **Formulation:** | PBS, pH 7.0<br>Contains no stabilizers or preservatives |
| **Endotoxin:** | ≤0.5EU/mg (≤0.0005EU/μg)<br>Determined by LAL assay |
| **Purity:** | ≥95%<br>Determined by SDS-PAGE |
| **Sterility:** | 0.2 μm filtration |
| **Production:** | Purified from mammalian 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 1D3-CP118 monoclonal antibody is a chimeric version of the original 1D3 antibody. The variable domain sequences are identical but the constant region sequences have been switched from rat IgG2a to mouse IgG2a. CP118 antibody has an effector function competent Fc domain allowing for activation of Fcγ receptors (FcγRs) to trigger antibody-dependent cellular cytotoxicity (ADCC), antibody-dependent cellular phagocytosis (ADCP), complement-dependent cytotoxicity (CDC) and opsonization to promote target cell depletion. The mouse IgG2a isotype demonstrates strong effector functions due to potent

interaction with mFcγRIV, which is functionally similar to the FcγRIIIa receptor involved in human ADCC. Species-matched chimeric antibodies result in less immunogenicity and formation of anti-drug antibodies (ADAs) than 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. The 1D3-CP118 monoclonal antibody reacts with mouse CD19, a B cell-specific 95 kDa transmembrane glycoprotein of the immunoglobulin superfamily. CD19 contains two extracellular immunoglobulin-like domains and an extensive cytoplasmic tail. It functions as a positive regulator of B-cell receptor signaling in conjunction with CD21 and CD81. CD19 is highly expressed on autoreactive B cells and in most lymphomas and leukemias including some early B-cell malignancies that do not express CD20. For these reasons CD19 is an attractive target for the immunotherapy of lymphoproliferative disorders and autoimmune disease.

## 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/cp118?bxcs=9k1b3a#tab_references or scan the QR code below.

**Bio X Cell, LLC**
https://bioxcell.com
+1-866-787-3444
customerservice@bioxcell.com