# **Technical Data Sheet**

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<u>Attention</u>: 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 <a href="https://bioxcell.com/terms-and-conditions">https://bioxcell.com/terms-and-conditions</a>.

## 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:
 CP128

 Clone:
 2.43-CP128

 Isotype:
 Mouse IgG2b, κ

Recommended Isotype Control(s): InVivoPlus mouse IgG2b isotype control, unknown specificity

**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer

**Immunogen:** Mouse CTL clone L3

**Reported Applications:** in vivo CD8+ T cell depletion\*

Western blot\*

\*Reported for the original rat lgG2b 2.43 antibody

**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 CHO 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 2.43-CP128 monoclonal antibody is a chimeric version of the original 2.43 antibody. The variable domain sequences are identical to the original 2.43 but the constant region sequences have been switched from rat lgG2b to mouse lgG2b. The 2.43-CP128 antibody contains no Fc mutations just as the original rat lgG2b antibody does not. The 2.43-CP128 monoclonal antibody reacts with mouse CD8α. The CD8 antigen is a transmembrane glycoprotein that acts as a co-receptor for the T cell receptor (TCR). Like the TCR, CD8 binds to class I MHC molecules displayed by antigen presenting cells (APC). CD8 is

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primarily expressed on the surface of cytotoxic T cells, but can also be found on thymocytes, natural killer cells, and some dendritic cell subsets. CD8 most commonly exists as a heterodimer composed of one CD8α and one CD8β chain however, it can also exist as a homodimer composed of two CD8α chains. Both the CD8α and CD8β chains share significant homology to immunoglobulin variable light chains. The molecular weight of each CD8 chain is approximately 34 kDa.

### **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 <a href="https://bioxcell.com/fags">https://bioxcell.com/fags</a>.

### **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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