# Technical Data Sheet

## RecombiMAb anti-mouse CD8α (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:** | **CP081** |
| **Clone:** | **YTS169.4-CP081** |
| **Isotype:** | Mouse IgG2a (LALA-PG), 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:** | CBA mouse thymocytes |
| **Reported Applications:** | Flow Cytometry<br>Western Blot<br>For information on *in vivo* applications, please contact technicalservice@bioxcell.com |
| **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 YTS 169.4-CP081 monoclonal antibody is a recombinant, chimeric version of the original antibody. The variable domain sequences are identical but the constant region sequences have been switched from rat IgG2b, kappa to mouse IgG2a, kappa for use in murine models. 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. Additionally, YTS 169.4-CP081 contains LALA-PG mutations in the heavy chain Fc fragment rendering it unable to bind endogenous murine Fcγ receptors or C1q to induce antibody-dependent, cell-mediated cytotoxicity (ADCC) or complement-dependent cytotoxicity (CDC). The LALA-PG variant has demonstrated significantly reduced effector function, C1q binding and C3 fixation compared to other common silencing mutations such as the LALA and DANG variants while retaining favorable biophysical and manufacturing properties. YTS 169.4-CP081 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 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.

## 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

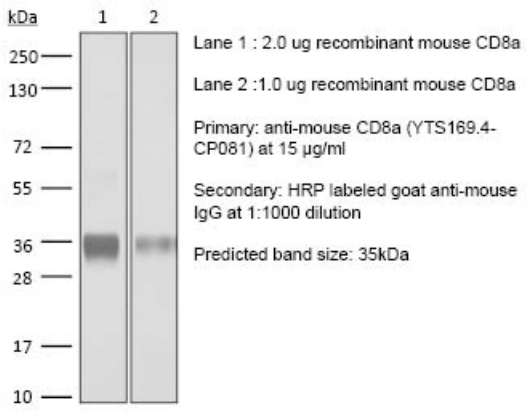
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

## Application References

For a complete list of references, visit https://bioxcell.com/cp081?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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