Technical Data Sheet

RecombiMAb anti-mouse CD45.2 (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:	**CP063**
Clone:	**104.2-CP063**
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:	B10.S mouse thymocytes and splenocytes
Reported Applications:	Western Blot Flow Cytometry CD45-targeted myeloablative conditioning (antibody drug conjugate) Immunohistochemistry in-vitro CD45.2 blockade in-vivo CD45.2 blockade *Reported for the original 104.2 antibody. For information on *in vivo* applications, please contact technicalservice@bioxcell.com
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤0.5EU/mg (≤0.0005EU/μg) Determined by LAL gel clotting assay
Purity:	≥95% 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% 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 104.2-CP063 monoclonal antibody is a recombinant, chimeric version of the original 104.2 antibody. The variable

domain sequences are identical, but the constant region includes the Fc silencing mutation variant LALA-PG, 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. Infusion-related toxicities have been observed with anti-CD45 antibodies likely due to effector function of the wild-type antibody. The 104.2 monoclonal antibody reacts with mouse CD45.2 a 180-240 kDa member of the protein tyrosine phosphatase family. CD45.2 is an alloantigen of CD45 and is only expressed by certain mouse strains including C57BL/6, CBA, 129, A, AKR, C58, DBA/1, DBA/2, BALB/c, and C3H/He. The 104.2 monoclonal antibody does not react with leukocytes of CD45.1-expressing mouse strains including DA, SJL/J, RIII, and STS/A. CD45.2 is expressed on all hematopoietic cells except mature erythrocytes and platelets and is thought to be involved in TCR and BCR signal transduction. The 104.2 antibody has been shown to block B cell responses in vitro and reduce serum autoantibody concentration in vivo in SLE-prone mice. 104.2 antibody conjugated to cytotoxic compounds has been shown to deplete hematopoietic cells in-vivo and is a promising targeted conditioning strategy for autologous or allogeneic hematopoietic stem cell transplantation.

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

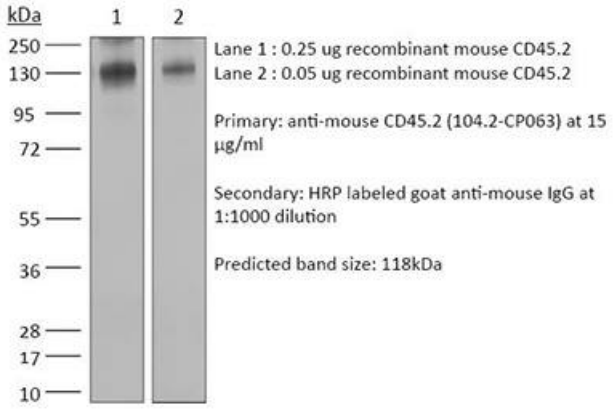
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/cp063?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.



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

Conditions: For research use only. Not for use in diagnostic or therapeutic procedures.
Not for resale.
Bio X Cell, Bio X Cell logo, and all other trademarks are the property of Bio X Cell, LLC © 2025 Bio X Cell, LLC