Technical Data Sheet

RecombiMab anti-mouse c-Kit (CD117)

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:	**CP070**
Clone:	**2B8-CP070**
Isotype:	Mouse IgG2a
Recommended Isotype Control(s):	RecombiMAb mouse IgG2a isotype control, unknown specificity
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Mouse bone marrow mast cells
Reported Applications:	Western Blot Flow Cytometry Immunofluorescence Immunohistochemistry Antibody-Drug Conjugate Reported for the original 2B8 antibody. For information on *in vivo* applications, please contact (technicalservice@bioxcell.com)
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 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 2B8-CP070 monoclonal antibody is a recombinant, chimeric version of the original 2B8 antibody. The variable domain

sequences are identical but the constant region sequences have been switched from Rat IgG2b, κ to Mouse IgG2a, κ for use in murine models. Species-matched chimeric antibodies exhibit regulated effector functions—including Fc receptor binding and complement activation—and 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 2B8 monoclonal antibody reacts with mouse c-Kit also known as CD117, Steel factor receptor, stem cell factor receptor, and mast cell growth factor. c-Kit is a 145 kDa transmembrane tyrosine kinase and an immunoglobulin superfamily member. c-Kit is expressed on hematopoietic progenitor cells, mast cells, and acute myeloid leukemia (AML) cells and is a critical hematopoietic stem and progenitor cell receptor for the cytokine stem cell factor (SCF). The interaction of the c-Kit receptor and SCF promotes the proliferation and differentiation of hematopoietic progenitor cells. Studies have demonstrated that when 2B8 is conjugated to a cytotoxic compound, the antibody-drug conjugate (ADC) potently depleted greater than 99% of hematopoietic stem cells (HSCs) in-vivo and enabled the successful engraftment of donor hematopoietic cells without resulting in neutropenia or lymphopenia. The 2B8-ADC was more efficiently internalized by EML cells and more effective at depleting immunophenotypic and functional HSCs in vivo than murine anti-c-Kit clones 3C11 or ACK2.

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

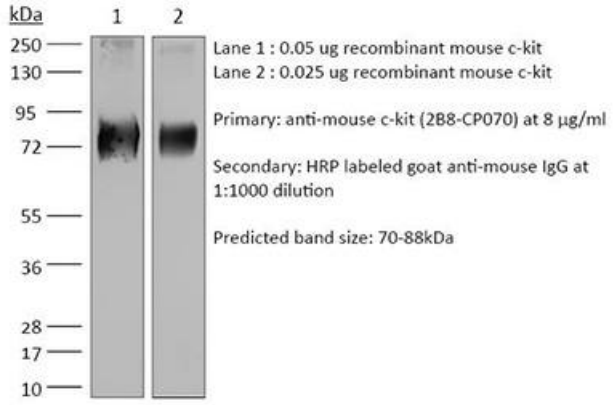
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/cp070?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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