Technical Data Sheet

RecombiMAb anti-mouse CXCR2 (CD182)

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:	**CP105**
Clone:	**Cx2Mab-1-CP105**
Isotype:	Mouse IgG2a, κ
Recommended Isotype Control(s):	RecombiMAb mouse IgG2a isotype control, unknown specificity
Recommended Dilution Buffer:	InVivoPure pH 8.0 Dilution Buffer
Immunogen:	Synthetic peptide corresponding to mouse CXCR2's N-terminal sequence - MGEFKVDKFNIEDFFSGDL
Reported Applications:	Flow cytometry For details on *in vivo* applications please contact technicalservice@bioxcell.com
Formulation:	PBS, pH 8.0 Contains no stabilizers or preservatives
Endotoxin:	≤0.5EU/mg (≤0.0005EU/μg) Determined by LAL assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 μm filtration
Production:	Purified from mammalian cell supernatant in an animal-free facility
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 Cx2Mab-1-CP105 monoclonal antibody is a recombinant, Fc-engineered chimeric version of the original Cx2Mab-1 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. This 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. The highly controlled sequence and lack of genetic drift in recombinant antibodies provide more reliable and reproducible results over hybridoma derived antibodies. The Cx2Mab-1 antibody reacts with mouse CXC chemokine receptor 2 (CXCR2), also known as CD182, GRO/MGSA receptor, and IL-8RB. This antibody targets the N-terminal extracellular domain of CXCR2, which is important for ligand binding and receptor activation. CXCR2 is a G protein-coupled receptor (GPCR) that coordinates immune cell trafficking during immune responses. CXCR2 ligands include its primary ligands CXCL8 (IL-8) and CXCL1 (GRO-α) as well as CXCR2, CXCL2, CXCL3, CXCL5, CXCL6, and CXCL7. Leukocytes (particularly neutrophils and monocytes) constitutively express CXCR2, whereas parenchymal cells such as fibroblasts, hepatocytes, and neurons also express this receptor to varying degrees of abundance. CXCR2 and its ligands facilitate various tissue-dependent signals for regulating cellular survival, proliferation, differentiation, adhesion, and migration. In cancer tissues, CXCR2 signaling is critical to the processes of tumor angiogenesis, growth, and chemoresistance, and a high expression of CXCR2 on myeloid cells drives their migration to the tumor cells. Blockade of CXCR2-mediated recruitment of myeloid-derived suppressor cells (MDSCs) into the tumor microenvironment and the pre-metastatic niche is emerging as an attractive approach to boost cancer immunotherapy.

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/cp105?bxcs=9k1b3a#tab_references or scan the QR code below.

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