Technical Data Sheet

InVivoMAb anti-mouse CCR2 (CD192)



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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 v	vill be noted on the certificate of analysis that ships with this product.

Product Information

Catalog Number:	BE0457
Clone:	C2Mab-6
Isotype:	Rat lgG1, к
Recommended Isotype Control(s):	InVivoMAb rat IgG1 isotype control, anti-horseradish peroxidase
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Three KLH-conjugated synthetic peptides corresponding to the N-terminal sequence of mouse CCR2
Reported Applications:	Flow cytometry ELISA For details on <i>in vivo</i> applications, please contact
	technicalservice@bioxcell.com
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	<2EU/mg (<0.002EU/μg) Determined by LAL gel clotting assay
Purity:	>95% Determined by SDS-PAGE
Sterility:	0.2 µm filtered
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
RRID:	
Molecular Weight:	150 kDa

Description

The C2Mab-6 monoclonal antibody reacts with mouse CC chemokine receptor type-2 (CCR2) also known as MCP-1 receptor and CD192. CCR2 is the primary receptor of C-C motif ligand 2 (CCL2) also known as monocyte chemoattractant protein-1 (MCP-1). CCR2 can also bind CCL7 and CCL12. CCR2 is a multi-pass transmembrane G protein-coupled receptor (GPCR) that is expressed on natural killer (NK) cells, macrophages, peripheral blood monocytes, and activated T cells, B cells, and immature dendritic cells (DCs). CCL2-CCR2 signaling is involved in the regulation of immune cells' chemotaxis/migration, and during microbial infections, CCR2-positive macrophages and neutrophils drive innate immune responses. In neurobiology, CCR2 plays an important role in mediating peripheral nerve injury-induced neuropathic pain and facilitates the recruitment of macrophages/monocytes to the injury site following cerebral injury. The crosstalk between CCR2 on tumor-infiltrating immune and stromal cells and CCL2 on tumor cells is known to influence tumor growth, angiogenesis, and metastasis. CCR2 antagonists are often studied in relation to unwanted immune responses in inflammatory and autoimmune diseases, immunomodulation of the tumor microenvironment (TME) for enhancing anti-tumor immunity, and Treg function. The C2Mab-6 antibody is raised against and binds to the N-terminal sequence of CCR2, a region important for ligand recognition and binding. Cell-based screening has shown that the C2Mab-6 antibody has a strong affinity for both

endogenous and exogenous mouse CCR2, indicating that this antibody can potentially be used to block CCR2 in in vivo preclinical studies.

Storage

Store at the stock concentration at $4\,^\circ\text{C}$. 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 <u>https://bioxcell.com/be0457?bxcs=9k1b3a#tab_references</u> or scan the QR code below.



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