

Technical Data Sheet

InVivoSIM anti-human CCL2 (MCP-1) (Carlumab biosimilar)



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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: SIM0122
Clone: Carlumab
Isotype: Human IgG1, κ
Recommended Isotype Control(s): RecombiMAb human IgG1 (E356D/M358L) isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer
Mutations: E356D/M358L
Immunogen: Human CCL2
Reported Applications: *in vivo* functional assays
in vitro functional assays
ELISA
Flow cytometry
Formulation: PBS, pH 7.0
Contains no stabilizers or preservatives
Endotoxin: ≤ 0.5 EU/mg (≤ 0.0005 EU/ μ g)
Determined by LAL assay
Purity: $\geq 95\%$
Determined by SDS-PAGE
Sterility: 0.2 μ m filtration
Production: Purified from cell culture supernatant in an animal-free facility
Purification: Protein A
Aggregation: $< 5\%$
Determined by SEC
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

This Carlumab biosimilar antibody uses the same variable regions as the therapeutic antibody Carlumab, making it ideal for research use. Carlumab is a fully human IgG1 monoclonal antibody that specifically targets chemokine (C-C motif) ligand 2 (CCL2), also known as monocyte chemoattractant protein-1 (MCP-1). CCL2 is a pro-inflammatory chemokine that plays a central role in the recruitment of monocytes, macrophages, and other CCR2-expressing immune cells to sites of

inflammation and tumor growth. Elevated CCL2 expression has been implicated in chronic inflammatory diseases, fibrosis, and numerous malignancies, where it contributes to tumor-associated macrophage recruitment, angiogenesis, metastasis, and immune suppression. By binding soluble CCL2, Carlumab is designed to inhibit CCL2-mediated chemotaxis and downstream inflammatory signaling. Although clinical development was discontinued due to limited and transient suppression of circulating CCL2, Carlumab remains a valuable research tool for investigating the CCL2/CCR2 signaling axis. This Carlumab biosimilar is well suited for studying monocyte recruitment, macrophage biology, inflammatory signaling, tumor microenvironment regulation, and for benchmarking the therapeutic antibody's target engagement and neutralizing activity in pre-clinical experimental systems.

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 [?utm_source=cr9k1b#tab_references](https://bioxcell.com/?utm_source=cr9k1b#tab_references) or scan the QR code below.



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