Technical Data Sheet

InVivoMAb anti-mouse C5aR (CD88)

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:	**BE0478**
Clone:	**20/70**
Isotype:	Rat IgG2b, κ
Recommended Isotype Control(s):	InVivoMAb rat IgG2b isotype control, anti-keyhole limpet hemocyanin
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Mouse C5aR transfected RBL-2H3 cells
Reported Applications:	*in vivo* blocking of C5aR *in vitro* blocking of C5aR *in vitro* functional assay Flow cytometry immunofluorescence
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 filtered
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
RRID:	
Molecular Weight:	150 kDa

Description

The 20/70 monoclonal antibody reacts with mouse C5aR (CD88), and it does not cross-react with the human species. C5aR is also known as C5A, C5R1, and CD88, and it is a seven-pass transmembrane protein that is expressed on peritoneal monocytes/macrophages, alveolar macrophages, neutrophils, and peripheral blood myeloid cells. C5aR is a receptor for the chemotactic and potent proinflammatory peptide anaphylatoxin C5a, which is central to innate and adaptive immune responses. C5aR acts upstream of or within defense mechanisms against Gram+ bacterial infections, neutrophil chemotaxis, and the response to peptidoglycan. C5aR activation stimulates chemotaxis, granule enzyme release, intracellular calcium release, and superoxide anion production. The C5a-C5aR signaling contributes to the pathophysiology of inflammation-induced diseases. Several in vivo studies on mouse models of cancer (e.g., breast, cervical, lung, ovarian, colorectal, and skin cancer) have suggested the C5a-C5aR signaling promotes tumor progression through modulation of angiogenesis and immune cell recruitment and phenotype. Blocking the C5a-C5aR pathway through antibodies has significant potential in cancer immunotherapy by reversing the immunosuppressive tumor microenvironment and improving the efficacy of other treatments, such as checkpoint inhibitors.

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/be0478?bxcs=9k1b3a#tab_references or scan the QR code below.

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