Technical Data Sheet

InVivoMAb anti-mouse CXCR5 (CD185)

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:	**BE0485**
Clone:	**Cx5Mab-3**
Isotype:	Rat IgG2b, κ
Recommended Isotype Control(s):	InVivoPlus rat IgG2b isotype control, anti-keyhole limpet hemocyanin
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	A synthetic peptide corresponding to the N-terminal sequence of mouse CXCR5 (MNYPLTLDMGSITYNMDDL)
Reported Applications:	Flow cytometry ELISA For details 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 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 Cx5Mab-3 monoclonal antibody reacts with mouse C-X-C chemokine receptor type 5 (CXCR5), also known as Gpcr6, Blr1, and CD185. The CXCR5 protein is mainly expressed as a cell surface receptor on B cells and a subset of T cells (e.g., T follicular helper or Tfh cells). CXCR5's primary ligand is CXCL13 that is also known as B-cell attracting chemokine 1 (BLC). Upon activation, CXCR5 couples with heterotrimeric G proteins to activate downstream PI3K/Akt, PLC, Rac and MAPK ignaling pathways. The CXCR5-CXCL13 signaling is essential for B-cell homing to follicles and for Tfh cell migration in lymphoid organs, facilitating immune responses. The interaction of CXCR5+ Tfh cells with germinal center B cells drives their differentiation into plasma cells or memory B cell formation during infection, autoimmunity, and cancer. CXCR5 is expressed in cancers also, and high PD-1-expressing CD8+ T cells in tumors overexpress CXCL13. The CXCL13-CXCR5 axis-mediated upregulation of lymphocyte infiltration, activation, and differentiation enhances the antitumor immune responses. Like CD8+ T effector cells, the CXCR5+ CD8+ T cells also depict cytolytic activity in tumor microenvironments. CXCR5 as well as its ligand CXCL13 are emerging as attractive targets/biomarkers for immune checkpoint inhibition immunotherapy. NOTE – please see Ishikawa et. al. Microbes & Immunity. 2025; 2(1): 101-113 (doi: 10.36922/mi.5664) for the original characterization data of the Cx5Mab-3 antibody.

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/be0485?bxcs=9k1b3a#tab_references or scan the QR code below.

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