

# Technical Data Sheet

## InVivoMAb anti-rat CD45RC (OX22)



**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://biocell.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:** BE0475  
**Clone:** OX-22  
**Isotype:** Mouse IgG1, κ  
**Recommended Isotype Control(s):** InVivoMAb mouse IgG1 isotype control, unknown specificity  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Immunogen:** Phytohemagglutinin-activated rat lymph node cells  
**Reported Applications:** *in vivo* depletion of CD45RChigh cells  
*ex vivo* depletion of CD45RChigh cells  
*in vitro* selection of CD45RC+ cells  
*in vitro* functional assay  
Immunohistochemistry (frozen)  
Immunohistochemistry (paraffin)  
Immunofluorescence  
Flow cytometry  
**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:** [https://doi.org/10.5281/zenodo.1260000](#)  
**Molecular Weight:** 150 kDa

### Description

The OX-22 antibody reacts with CD45RC, an exon 5 splice variant (exon C) of the tyrosine phosphatase CD45. Distinct molecular weight isoforms of CD45 result from the differential splicing of three exons (A, B, and C) encoding a portion of the N-terminal extracellular domain. CD45RC is a single-chain type I membrane glycoprotein, and it is expressed on B cells, the majority of CD8+ T cells, and about three-quarters of CD4+ T cells, but not on myeloid cells. From a functional perspective, the CD45RC molecule is involved in lymphocyte signaling and is associated with inflammatory responses (e.g., defective IL-2 production in Long-Evans Cinnamon rats' peripheral CD4+ T cells). CD45RC expression levels in rats define CD4 T cells to have two different functional subpopulations with unique cytokine profiles, i.e., CD45RChigh or CD45RClow. The OX22 antibody is commonly used as a CD45RC marker to detect and isolate these sub-populations. In some *in vivo* studies, the antibody is also used to deplete CD45RChigh subsets. CD45RClow T cells exhibit strong immunoregulatory properties, particularly in Tregs, while memory T cells can be found in both CD45RChigh and CD45RClow subsets. CD45RC is a promising target in preclinical immunotherapy studies, and its precise targeting helps to manage severe immune-mediated

conditions like Graft-versus-Host Disease (GvHD) and autoimmune diseases without compromising beneficial anti-tumor or antiviral immunity.

## 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://biocell.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://biocell.com/be0475?bxcs=9k1b3a#tab\\_references](https://biocell.com/be0475?bxcs=9k1b3a#tab_references) or scan the QR code below.



---

**Bio X Cell, LLC**

<https://biocell.com>

+1-866-787-3444

[customerservice@biocell.com](mailto:customerservice@biocell.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**