

# Technical Data Sheet

## InVivoMAb anti-mouse CD45RB



**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:** BE0019  
**Clone:** MB23G2 (HB220)  
**Isotype:** Rat IgG2a,  $\kappa$   
**Recommended Isotype Control(s):** InVivoMAb rat IgG2a isotype control, anti-trinitrophenol  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Immunogen:** Anti-immunoglobulin activated mouse B cells  
**Reported Applications:** *in vivo* anti-CD45RB mediated tolerance induction  
*in vivo* pre-mNK cell depletion  
**Formulation:** PBS, pH 7.0  
Contains no stabilizers or preservatives  
**Endotoxin:** <2EU/mg (<0.002EU/ $\mu$ g)  
Determined by LAL gel clotting assay  
**Purity:** >95%  
Determined by SDS-PAGE  
**Sterility:** 0.2  $\mu$ m filtered  
**Production:** Purified from cell culture supernatant in an animal-free facility  
**Purification:** Protein G  
**RRID:** [AB\\_1107653](https://abnova.com/AB_1107653)  
**Molecular Weight:** 150 kDa

### Description

The HB220 antibody reacts with mouse CD45RB a 220 kDa transmembrane protein tyrosine phosphatase expressed on peripheral B cells naïve T cells thymocytes and weakly on macrophages and dendritic cells. CD45RB is one of 5 isoforms of CD45 which result from alternative splicing of exons 4-6. CD45RB results from exon 5 splicing. CD45RB is critical for intracellular signaling in T cells in response to antigen stimulation as indicated by the severe immunodeficiency observed in CD45-deficient mice. As T cells progress from naïve to memory cells and become activated CD45RB expression is downregulated. Additionally the intensity of CD45RB expression can be used to differentiate between functionally distinct CD4<sup>+</sup> T cell subsets which secrete differing cytokine profiles. The primary ligands for CD45 include galectin-1 CD2 CD3 CD4 and Thy-1.

### 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/catalogsearch/result/?q=BE0019#tab\\_references](https://bioxcell.com/catalogsearch/result/?q=BE0019#tab_references) or scan the QR code below.



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*Not for resale.*

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