# 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

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|---|---|
| **Catalog Number:** | **BE0019** |
| **Clone:** | **MB23G2 (HB220)** |
| **Isotype:** | Rat IgG2a, κ |
| **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<br>*in vivo* pre-mNK cell depletion |
| **Formulation:** | PBS, pH 7.0<br>Contains no stabilizers or preservatives |
| **Endotoxin:** | ≤1EU/mg (≤0.001EU/µg)<br>Determined by LAL gel clotting assay |
| **Purity:** | ≥95%<br>Determined by SDS-PAGE |
| **Sterility:** | 0.2 µm filtered |
| **Production:** | Purified from cell culture supernatant in an animal-free facility |
| **Purification:** | Protein G |
| **RRID:** | 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 naëâve 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 naëâve 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+ 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/be0019?bxcs=9k1b3a#tab_references or scan the QR code below.

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