

# Mouse Anti-Human T-Cell Receptor V beta-20 Monoclonal Antibody

## Mouse, Monoclonal (TRB@)

Cat. No. DMAB3463MH

Lot. No. (See product label)

### PRODUCT INFORMATION

**Product Overview:** Monoclonal Antibody to T-Cell Receptor V beta-20 Phycoerythrin conjugated

**Specificity:** Human variable beta 20 chain of the T-cell receptor also called TCRBV20S1 according to the nomenclature from Wei et al.(1). V beta 20 is a single membered subfamily (represented by the sequence HUT 102 (2). This sequence is sometimes referred to as Vbeta18 (3). This antibody has been characterized by cell sorting of PBL with ELL 1.4 followed by molecular biology analysis. In 8 sequences analyzed, only J beta 2.7 and J beta 1.1 were found associated with V beta 20. The N regions were different in each case. This specificity of this antibody has been confirmed at the First Human TcR Monoclonal Antibody Workshop in San Francisco in 1995 (5).

**Isotype:** IgG2a

**Clone:** FLL2.5

**Source:** Ascites

**Host animal:** Mouse. Hybridization of NS1 x Biozzi spleen cells

**Immunogen:** Mouse T-cell clone hybridoma transfected with human V beta 20 gene segment

**Format:** Phyco, Liquid .

**Applications:** T-cell repertoire studies Flow cytometry: 20ul/5 x 10<sup>5</sup> cells/test or 100ul whole blood Since this antibody recognizes a small cell population, it is often preferable to use double staining experiments with another T cell marker (CD2, CD3, CD4, CD8, etc.). Double staining is also possible with the purified unlabelled form. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.

**Purification:** Ion exchange chromatography

**Affinity Constant:** Not determined

### REFERENCES

1. Kieckhefer, Michele C.; Shusta, Eric V.; Teyton, Luc; Wittrup, K. Dane; Kranz, David M. (1999). "Selection of functional T cell receptor mutants from a yeast surface-display library". Proceedings of the National Academy of Science of the United States of America 96 (10): 5651–5656.
2. Abram, Clare L.; Lowell, Clifford A. (2007-03-13). "The Expanding Role for ITAM-Based Signaling Pathways in Immune Cells". Science Signalling 2007 (377): re2.

### ANTIGEN GENE INFORMATION

**Gene Name:** [TRB@ T cell receptor beta locus \[ Homo sapiens \]](#)

**Official Symbol:** TRB@

**Synonyms:** TRB@; T cell receptor beta locus; TRB; TCRB; T-cell receptor, beta cluster; T-cell antigen receptor, beta polypeptide, T-cell receptor, beta cluster; T-Cell Receptor V beta-20

**GeneID:** [6957](#)

**MIM:** [186930](#)

**Chromosome Location:** 7q34

**Pathway:** Cytokines and Inflammatory Response; T Cell Receptor Signaling Pathway

### PACKAGING

**Concentration:** Not determined

**Buffer:** PBS containing 2mg/ml BSA

**Preservative:** 0.1% Sodium azide

**Storage:** Store (in the dark) at 2-8 C. DO NOT FREEZE.

**Warning:** This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1 – 1.0 %. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.