

Mouse Anti-Human T-Cell Receptor V beta-5.2 Monoclonal Antibody

Mouse, Monoclonal (TRB@)

Cat. No. DMAB4368MH

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: Monoclonal Antibody to T-Cell Receptor V beta-5.2. Phycoerythrin conjugated

Specificity: Human variable beta 5.2 chain of the T-cell receptor also called TCRBV5S2 according to the nomenclature from Wei et al.(1). This antibody recognizes only the PL2.5 sequence (2). It does not recognize the V beta 5.1 [HPB51 sequence (3) and the V beta 5.3 (IGRb08 sequence (4)]. Recognition of other members of the V beta 5 family has not been detected but cannot be formally excluded. Cell sorting on PBL gives a heterogenous pattern of staining of the sorted cells. The antibody may thus be sensitive to the clonotypic environment (V alpha, J alpha, D beta, J beta) though molecular analysis of transcripts from the sorted V beta 5.2 positive cells shows different V alpha, D and J beta (5). The specificity of this antibody has been confirmed at the First Human TcR Monoclonal Antibody Workshop in San Francisco in 1995.(6)

Isotype: IgG1

Clone: A136214

Host animal: Mouse. Hybridization of NS1xBiozzi in spleen cells.

Immunogen: 1C1 V beta 5.2 positive cell line

Source: Ascites

Format: Phyco, Liquid

Applications: T-cell repertoire studies. Flow cytometry: 20ul/5 x 10⁵ cells/test or 100ul whole blood. 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.

Affinity Constant: Not determined

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-5.2

GeneID: [6957](#)

MIM: [186930](#)

Chromosome Location: 7q34

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

PACKAGING

Concentration: 12.5ug/ml

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.

REFERENCES

1. Kieke, 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.