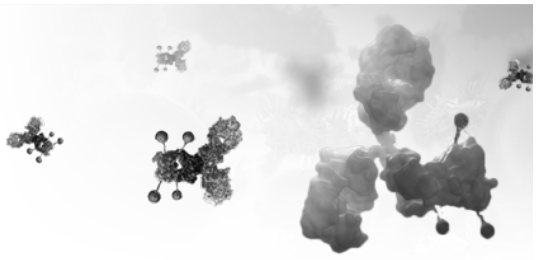

# Mouse Anti-Human TCR V beta 3 monoclonal antibody, clone KPWJ.2 (CABT-L547)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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|---|---|
| **Specificity** | This antibody detects T Cell receptor from human samples and has been successfully used in flow cytometry, immunohistochemistry (frozen tissue), immunoprecipitation applications. |
| **Target** | TCR |
| **Immunogen** | Thymus, spleen and mesenteric lymph nodes isolated from a mouse transgenic for human Vb3 TcR. |
| **Isotype** | IgG2a |
| **Source/Host** | Mouse |
| **Species Reactivity** | Human |
| **Clone** | KPWJ.2 |
| **Purification** | Protein A purified |
| **Conjugate** | Unconjugated |
| **Applications** | FC, IHC-F, IP |
| **Format** | Liquid |
| **Concentration** | 1 mg/ml |
| **Buffer** | PBS |
| **Preservative** | None |
| **Storage** | -20° C. Avoid Freeze/Thaw Cycles. |

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# BACKGROUND

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| **Introduction** | The ability of T cell receptors (TCR) to discriminate foreign from self-peptides presented by major histocompatibility complex (MHC) class II molecules is essential for an effective adaptive immune response. TCR recognition of self-peptides has been linked to autoimmune disease. Mutant self-peptides have been associated with tumors. Engagement of TCRs by a family of bacterial toxins know as superantigens has been responsible for toxic shock syndrome. Autoantibodies to V beta segments of T cell receptors have been isolated from patients with rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE). The autoantibodies block TH1-mediated inflammatory autodestructive reactions and are believed to be a method by which the immune system compensates for disease. T Cell and TCR Diversity Most human T cells express the TCR alpha-beta and either CD4 or CD8 molecule (single positive, SP). A small number of T cells lack both CD4 and CD8 (double negative, DN). Increased percentages of alpha-beta DN T cells have been identified in some autoimmune and immunodeficiency disorders. Gamma-delta T cells are primarily found within the epithelium. They show less TCR diversity and recognize antigens differently than alpha-beta T cells. Subsets of gamma-delta T cells have shown antitumor and immunoregulatory activity. |
| **Keywords** | Tcrb; T-cell receptor beta chain; TCB; TCBC1; RATTCB; RATTCBC1; variable region-beta 8.5; T-cell receptor beta cluster |

# GENE INFORMATION

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|---|---|
| **Entrez Gene ID** | 6957 |
| **UniProt ID** | P01850A0A5B9 |

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