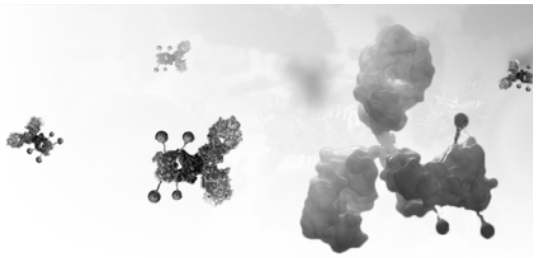

Mouse Anti-Human TCR V beta F1 monoclonal antibody, clone 9B4 (CABT-L540)

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

PRODUCT INFORMATION

Specificity	This antibody targets TCR Beta F1 in FACS, FISH, IHC, IHC-P, IP, and WB applications and shows reactivity with Human samples.
Target	TCR Beta F1
Immunogen	Human TCR β chain constant region
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human, Yeast, Non-human primate, Mouse
Clone	9B4
Purification	Protein G purified
Conjugate	Unconjugated
Applications	FC, IHC, IHC-P, IP, WB
Molecular Weight	13 kDa
Format	Liquid
Concentration	0.15 mg/ml
Size	200 µg
Buffer	PBS with 0.5% BSA

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Preservative	0.1% Sodium Azide
Storage	-20° C. Avoid Freeze/Thaw Cycles

BACKGROUND

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

Entrez Gene ID	6957
UniProt ID	P01850A0A5B9

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