

FITC Anti-Human TCRβV 12 Antibody[S511]

Catalog Number: AN00373C

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

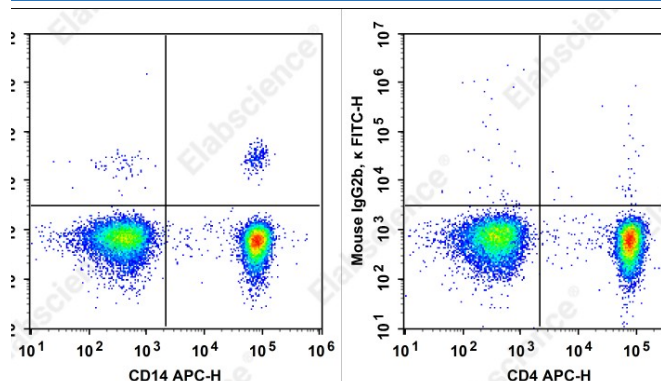
Reactivity	Human
Host	Mouse
Isotype	Mouse IgG2b, κ
Clone No.	S511
Isotype Control	FITC Mouse IgG2b, κ Isotype Control[MPC-11] [Product E-AB-F09812C]
Conjugation	FITC
Conjugation Information	FITC is designed to be excited by the Blue laser (488 nm) and detected using an optical filter centered near 530 nm (e.g., a 525/40 nm bandpass filter).
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% stabilizer.

Applications

Recommended usage

FCM	Each lot of this antibody is quality control tested by flow cytometric analysis. The amount of the reagent is suggested to be used 5 μL of antibody per test (million cells in 100 μL staining volume or per 100 μL of whole blood). Please check your vial before the experiment. Since applications vary, the appropriate dilutions must be determined for individual use.
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Data



Staining of normal human peripheral blood cells with APC Anti-Human CD4 Antibody and FITC Anti-Human TCRβV 12 Antibody[S511](left) or FITC Mouse IgG2b, κ Isotype Control (right). Cells in the lymphocytes gate were used for analysis.

Preparation & Storage

Storage	Keep as concentrated solution. This product can be stored at 2-8°C for 24 months. Please protected from prolonged exposure to light and do not freeze.
Shipping	Ice bag

Antigen Information

Alternate Names	TRAV12-1;TRAV12
Uniprot ID	A0A0B4J245

For Research Use Only

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Rev. V1.2

Background

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 known 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 (ref5). 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.