

PE/Cyanine 7 Anti-Human TCRβV 12 Antibody[S511]

Catalog Number: AN00373H

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	PE/Cyanine7 Mouse IgG2b, κ Isotype Control[MPC-11] [Product E-AB-F09812H]
Conjugation	PE/Cyanine 7
Conjugation Information	PE/Cyanine 7 is designed to be excited by the Blue (488 nm), Green (532 nm) and yellow-green (561 nm) lasers and detected using an optical filter centered near 775 nm (e.g., a 780/60 nm bandpass filter).
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% stabilizer.

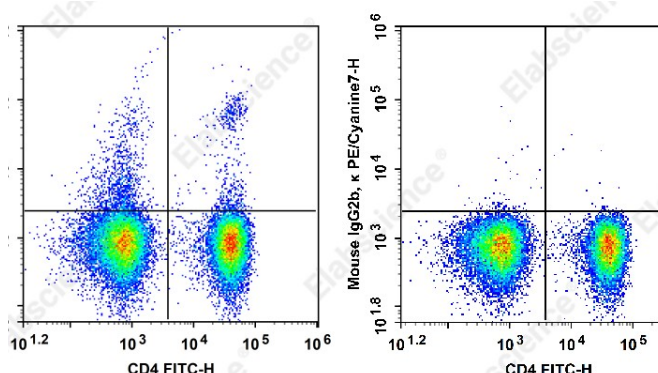
Applications

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.

Data



Staining of normal human peripheral blood cells with FITC Anti-Human CD4 Antibody and PE/Cyanine 7 Anti-Human TCRβV 12 Antibody[S511] (left) or PE/Cyanine 7 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

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.