

**violetFluor™ 450 Anti-Mouse TCR beta (H57-597) Antibody**  
**Catalog # ATB10368****Specification****violetFluor™ 450 Anti-Mouse TCR beta (H57-597) Antibody - Product Information**

Application	FC
Isotype	Armenian Hamster IgG
Concentration	0.2 mg/mL
Reactivity	Mouse
Formulation	10 mM NaH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, 0.09% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , 0.1% gelatin, pH7.2

**violetFluor™ 450 Anti-Mouse TCR beta (H57-597) Antibody - Additional Information**

Gene ID 21577

**Alternative Name(s)**

TCRb, TCRbeta, TCR-b chain, TCR-b, b-TCR

**Format**

violetFluor™ 450

**Preparation**

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

**Application Notes**

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

**Storage Conditions**

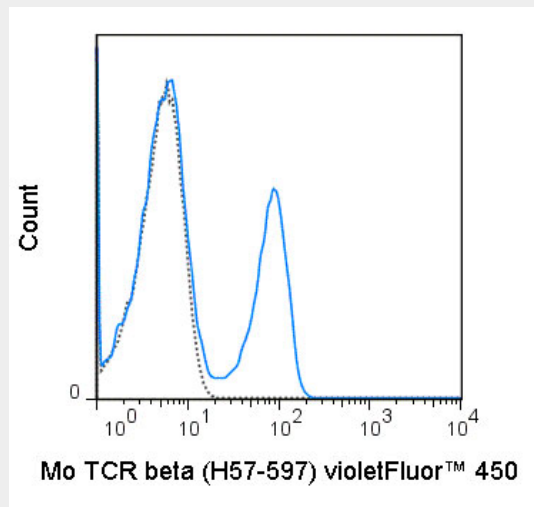
2-8°C protected from light

**violetFluor™ 450 Anti-Mouse TCR beta (H57-597) Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**violetFluor™ 450 Anti-Mouse TCR beta (H57-597) Antibody - Images**



C57Bl/6 splenocytes were stained with 0.25 ug violetFluor™ 450 Anti-Mouse TCR beta (ATB10368) (solid line) or 0.25 ug violetFluor™ 450 Armenian hamster IgG isotype control (dashed line).

#### **violetFluor™ 450 Anti-Mouse TCR beta (H57-597) Antibody - Background**

The H57-597 antibody is specific for the beta chain of the mouse T cell Receptor (TCR). This cell surface protein combines with a second protein chain (alpha chain) to form the alpha-beta TCR that is expressed by NK1.1+ thymocytes, NKT cells, and the majority of peripheral T cells. A small number of T cells may express an alternative heteromer of gamma/delta protein chains, known as the g/d TCR. These receptors participate in a complex with CD3, and with the co-receptors CD4 or CD8, to recognize and respond to antigens bound to MHC molecules on antigen-presenting cells. Such interactions promote T cell receptor signaling (T cell activation) and can result in a number of cellular responses including proliferation, differentiation, production of cytokines or activation-induced cell death. The H57-597 antibody is used as a phenotypic marker for T cells expressing the alpha-beta TCR. It is also widely used to cross-link surface TCR and thereby mimic TCR-mediated cell activation or induction of apoptosis. The antibody does not cross-react with cells expressing the g/d TCR.