

## Technical Data Sheet

### PE Anti-Mouse TCR $\alpha$ chain, TCR- $\beta$

**Catalog Number:** 201703, 201704

**Size:** 25 tests, 100 tests

**Target Name:** TCR  $\alpha$  chain, TCR- $\beta$

**Regulatory Status:** RUO

#### Product Details

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**Clone:** H57-597-R1

**Application:** FC

**Reactivity:** Mouse

**Format:** PE

**Isotype:** Rat IgG1

**Antibody Type:** Monoclonal

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA

**Protein Concentration:** Supplied at a lot-specific concentration.

**Storage&Handling:** The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.

**Recommended Usage:** For flow cytometric staining, it is recommended to use 5  $\mu$ L of this reagent per 0.5-1.0 million cells in a 100  $\mu$ L volume. Optimal reagent performance should be determined by titration for each specific application.

**Excitation Laser:** Blue Laser (488 nm) Green/Yellow laser (532/561nm)

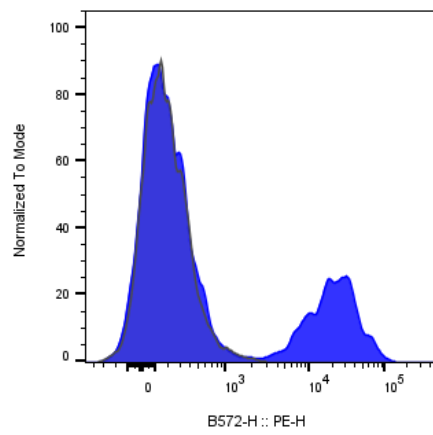
#### Background Information

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The T cell receptor (TCR) is a heterodimeric molecule expressed on the surface of T lymphocytes, responsible for recognizing antigens presented by MHC molecules. In ~95% of T cells, the TCR consists of an  $\alpha$  (alpha) and  $\beta$  (beta) chain ( $\alpha\beta$  TCR), while in ~5% of T cells, it is composed of  $\gamma$  (gamma) and  $\delta$  (delta) chains ( $\gamma\delta$  TCR). TCR  $\alpha$  is a member of the immunoglobulin superfamily and a component of the CD3/TCR complex, which includes CD3 subunits essential for signal transduction. This complex mediates antigen recognition, signal transduction, and subsequent T cell activation.

#### Product Data

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Mouse splenocytes stained with either PE Anti-Mouse TCR ? chain clone H57-597-R1 (blue histogram) or an isotype control (gray histogram).