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Anti-Mouse TCR Beta Antibody, Clone H57-597, FITC

Hamster (Armenian) monoclonal antibody against mouse T cell receptor beta, FITC-conjugated

Catalog #100-1613 | 100 µg | 0.5 mg/mL

Product Description

This monoclonal antibody reacts with the beta chain of mouse T cell receptor (TCR). TCR beta is a member of the immunoglobulin superfamily and together with the TCR alpha chain form the alpha-beta TCR. TCR beta is expressed by thymocytes in a developmentally regulated manner and by majority of peripheral T cells. Small number of T cells express an alternative heteromer of gamma and delta protein chains, known as the gamma-delta TCR. TCR-CD3 complex in conjunction with co-receptors CD4 or CD8 enable the recognition and response to antigens attached to major histocompatibility complex (MHC) molecules on antigen-presenting cells. Crosslinking of the TCR complex with H57-597 induces activation and proliferation of T cells or apoptosis, based on assay conditions. The H57-597 antibody clone has been widely used as a phenotypic indicator for T cells expressing alpha-beta TCR. This antibody does not cross-react with cells expressing the gamma-delta TCR.

Target Antigen:	TCR beta
Alternative Names:	Tcrb, TCR-b chain, TCR beta, Tib
Gene ID:	21577
Species Reactivity:	Mouse
Host Species:	Hamster
Clonality:	Monoclonal
Clone:	H57-597
Isotype:	Armenian hamster IgG
Immunogen:	Affinity-purified TCR from mouse T cell hybridoma DO-11.10
Conjugate:	FITC (Fluorescein isothiocyanate)

Applications

Verified Applications:	FC
Reported Applications:	FC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; FCXM: Flow cytometric crossmatch assay; FISH: Fluorescence in situ hybridization; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-F: Immunohistochemistry (frozen-tissue); IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; NMR: Nuclear magnetic resonance spectroscopy; RIA: Radioimmunoassay; WB: Western blotting

Properties

Product Formulation:	Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide and 0.1% gelatin
Purification:	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. Stable until expiry date (EXP) on label.
Directions for Use:	For flow cytometry, the suggested use of this antibody is ≤ 1 µg per 1 x 10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Related Products

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies, or contact us at techsupport@stemcell.com.

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