

iF647 Anti-Mouse CD5 Antibody

Catalog Number:	203207, 203208
Size:	25 tests, 100 tests
Target Name:	CD5, Ly-12, Ly-1, Lyt-1, Tp67
Regulatory Status:	RUO

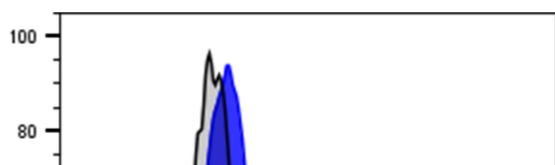
PRODUCT DETAILS

Clone:	53-7.3
Application:	Flow Cytometry
Reactivity:	Mouse
Format:	iF647
Isotype:	Rat IgG2a
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 uL of this reagent per 0.5-1.0 million cells in a 100 µL volume. Optimal reagent performance should be determined by titration for each specific application. iF647 has an excitation max at 656 nm and an emission max at 670 nm.
Excitation Laser:	Red Laser (633 nm)
Isotype Control:	300203

BACKGROUND INFORMATION

CD5 is a single-chain transmembrane glycoprotein expressed predominantly on mouse T cells and B1 cells, a specialized subset of IgM-secreting B cells. It functions as a negative regulator of antigen receptor signaling by attenuating signals from the T cell receptor (TCR) and B cell receptor (BCR), thereby modulating lymphocyte activation thresholds. Through interactions with intracellular phosphatases such as SHP-1, CD5 helps maintain immune tolerance and limits autoreactive responses. CD5-expressing cells are also associated with regulatory functions, including cytokine production such as IL-10. Owing to its regulatory role, CD5 is an important marker and functional modulator in mouse T and B cell development, activation, and immune homeostasis.

PRODUCT DATA



Mouse splenocytes were stained with iF647 Anti-CD5 antibody clone 53-7.3 (color-filled histogram) or an isotype (gray histogram).