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InnoCyto Inc.

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iF647 Anti-human/mouse T-bet Antibody

Catalog Number:	111503, 111504
Size:	25 tests, 100 tests
Target Name:	T-bet, T box 21, T-box expressed in T cells
Regulatory Status:	RUO

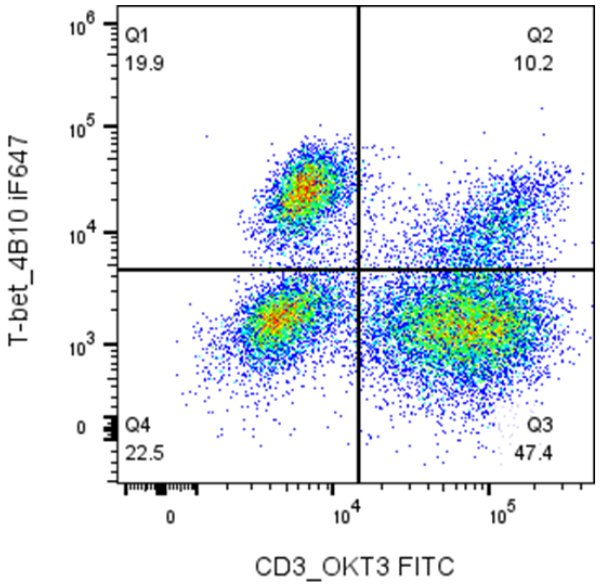
PRODUCT DETAILS

Clone:	TBX21M1
Application:	Intracellular Flow Cytometry
Reactivity:	Human, Mouse
Format:	iF647
Isotype:	Mouse 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 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:	301413

BACKGROUND INFORMATION

T-bet (TBX21) is a T-box transcription factor that plays a central role in the differentiation and function of Th1 $CD4^+$ T cells in both humans and mice. Its expression is induced by IFN-γ and it directly regulates the transcription of IFN-γ, IL-12 receptor β, and IL-2 through modulation of chromatin accessibility. Loss of T-bet impairs Th1 lineage commitment, while ectopic expression promotes Th1 polarization. Beyond T cells, T-bet also contributes to B cell class-switch recombination. Due to its conserved function across species, T-bet is a key regulator of cell-mediated immunity and inflammatory responses.

PRODUCT DATA



Human peripheral blood lymphocytes were stained with FITC Anti-human CD3 clone OKT3 and intracellular stained with iF647 Anti-human/mouse T-bet antibody clone TBX21M1.