

Anti-human/mouse T-bet Antibody

Catalog Number:	111501, 111502
Size:	25 ug, 100 ug
Target Name:	T-bet, T box 21, T-box expressed in T cells
Regulatory Status:	RUO

PRODUCT DETAILS

Clone:	4B10
Application:	Flow Cytometry
Reactivity:	Human, Mouse
Format:	Purified
Isotype:	Mouse IgG1
Antibody Type:	Monoclonal
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Protein Concentration:	0.5 mg/mL
Storage&Handling:	The antibody solution should be stored between 2°C and 8°C
Isotype Control:	301401

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.