

## T-bet (PTR1291) mouse mAb

<b>Catalog No :</b>	YM4701
<b>Reactivity :</b>	Human;Mouse;
<b>Applications :</b>	WB;IF;ELISA
<b>Target :</b>	TBX21
<b>Gene Name :</b>	TBX21 TBET TBLYM
<b>Protein Name :</b>	T-box transcription factor TBX21 (T-box protein 21) (T-cell-specific T-box transcription factor T-bet) (Transcription factor TBLYM)
<b>Human Gene Id :</b>	30009
<b>Human Swiss Prot No :</b>	Q9UL17
<b>Mouse Gene Id :</b>	57765
<b>Mouse Swiss Prot No :</b>	Q9JKD8
<b>Immunogen :</b>	Synthesized peptide derived from human T-bet. AA range: 100-200
<b>Specificity :</b>	This antibody detects endogenous levels of T-bet protein.
<b>Formulation :</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source :</b>	Mouse, Monoclonal/IgG2a, kappa
<b>Dilution :</b>	WB 1:500-2000. IF 1:100-500. ELISA 1:1000-5000
<b>Purification :</b>	Protein G
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

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**Molecularweight :** 58kD

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**Observed Band :** 62kD

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**Background :** T-box 21(TBX21) Homo sapiens This gene is a member of a phylogenetically conserved family of genes that share a common DNA-binding domain, the T-box. T-box genes encode transcription factors involved in the regulation of developmental processes. This gene is the human ortholog of mouse Tbx21/Tbet gene. Studies in mouse show that Tbx21 protein is a Th1 cell-specific transcription factor that controls the expression of the hallmark Th1 cytokine, interferon-gamma (IFNG). Expression of the human ortholog also correlates with IFNG expression in Th1 and natural killer cells, suggesting a role for this gene in initiating Th1 lineage development from naive Th precursor cells. [provided by RefSeq, Jul 2008],

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**Function :** Lineage-defining transcription factor which initiates Th1 lineage development from naive Th precursor cells both by activating Th1 genetic programs and by repressing the opposing Th2 and Th17 genetic programs . Activates transcription of a set of genes important for Th1 cell function, including those encoding IFN-gamma and the chemokine receptor CXCR3. Activates IFNG and CXCR3 genes in part by recruiting chromatin remodeling complexes including KDM6B, a SMARCA4-containing SWI/SNF-complex, and an H3K4me2-methyltransferase complex to their promoters and all of these complexes serve to establish a more permissive chromatin state conducive with transcriptional activation (By similarity). Can activate Th1 genes also via recruitment of Mediator complex and P-TEFb (composed of CDK9 and CCNT1/cyclin-T1) in the form of the super elongation complex (SEC) to super-enhancers and associated genes in

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**Subcellular** Nuclear

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**Location :****Expression :** T-cell specific.

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**Sort :** 1

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**No4 :** 1

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**Products Images**

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