

**Anti-TBX21 Rabbit Monoclonal Antibody**  
**Catalog # ABO15501****Specification**

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**Anti-TBX21 Rabbit Monoclonal Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">Q9UL17</a>
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-TBX21 Rabbit Monoclonal Antibody . Tested in IHC application. This antibody reacts with Human.

**Anti-TBX21 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 30009

**Other Names**

T-box transcription factor TBX21, T-box protein 21, T-cell-specific T-box transcription factor T-bet, Transcription factor TBLYM, TBX21, TBET, TBLYM

**Application Details**

IHC 1:50-1:200

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human T-bet / Tbx21

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-TBX21 Rabbit Monoclonal Antibody - Protein Information**

**Name** TBX21

**Synonyms** TBET, TBLYM

**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 (PubMed:<a href="http://www.uniprot.org/citations/10761931" target="\_blank">10761931</a>). Activates transcription of a set of genes important for Th1 cell function, including those encoding IFN- gamma and the chemokine receptor CXCR3. Induces permissive chromatin accessibility and CpG methylation in IFNG (PubMed:<a href="http://www.uniprot.org/citations/33296702" target="\_blank">33296702</a>). 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 activated Th1 cells (PubMed:<a href="http://www.uniprot.org/citations/27292648" target="\_blank">27292648</a>). Inhibits the Th17 cell lineage commitment by blocking RUNX1-mediated transactivation of Th17 cell-specific transcriptional regulator RORC. Inhibits the Th2 cell lineage commitment by suppressing the production of Th2 cytokines, such as IL-4, IL-5, and IL-13, via repression of transcriptional regulators GATA3 and NFATC2. Protects Th1 cells from amplifying aberrant type-I IFN response in an IFN-gamma abundant microenvironment by acting as a repressor of type-I IFN transcription factors and type-I IFN-stimulated genes. Acts as a regulator of antiviral B-cell responses; controls chronic viral infection by promoting the antiviral antibody IgG2a isotype switching and via regulation of a broad antiviral gene expression program (By similarity). Required for the correct development of natural killer (NK) and mucosal-associated invariant T (MAIT) cells (PubMed:<a href="http://www.uniprot.org/citations/33296702" target="\_blank">33296702</a>).

**Cellular Location**

Nucleus

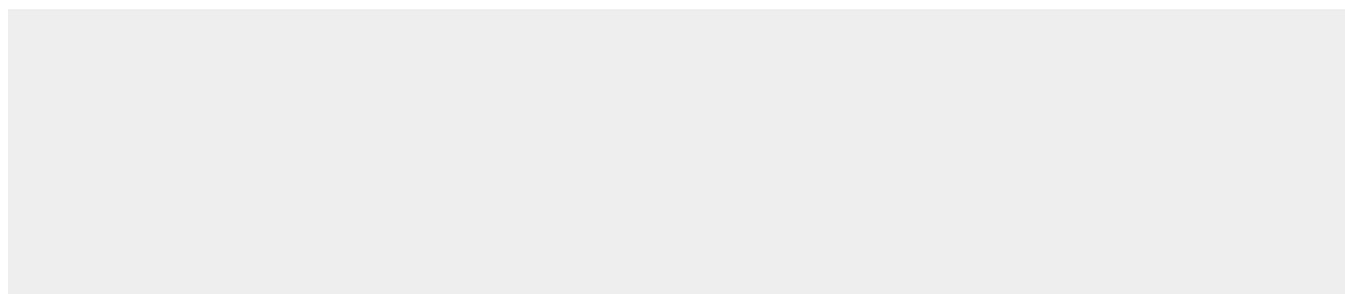
**Tissue Location**

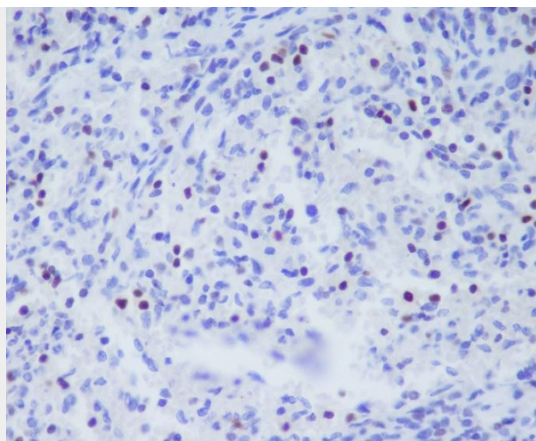
T-cell specific..

**Anti-TBX21 Rabbit Monoclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-TBX21 Rabbit Monoclonal Antibody - Images**



Immunohistochemical analysis of paraffin-embedded human spleen, using Tbet/Tbx21 Antibody.