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TBX21 antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI11163

Specification

TBX21 antibody - C-terminal region - Product Information

Application	**WB**
Primary Accession	Q9JKD8
Other Accession	NM_019507, NP_062380
Reactivity	**Human, Mouse, Rat, Rabbit, Pig, Sheep, Bovine, Dog**
Predicted	**Human, Mouse, Rat, Rabbit, Pig, Bovine, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**58kDa KDa**

TBX21 antibody - C-terminal region - Additional Information

Gene ID 57765

Alias Symbol	**TBT1, Tbet, Tblym**

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

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 100 ul of distilled water. Final anti-TBX21 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
TBX21 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

TBX21 antibody - C-terminal region - 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. 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 (PubMed:10761931, PubMed:17923685, PubMed:21095589). 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:27292648). Inhibits the Th17 cell lineage commitment by blocking RUNX1-mediated transactivation of Th17 cell-specific transcriptinal regulator RORC (PubMed:21151104). 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 (PubMed:15662016, PubMed:21690296, PubMed:23616576). 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 (PubMed:28623086). 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 (PubMed:27430722).

Cellular Location
Nucleus

Tissue Location
T-cell specific (PubMed:10761931, PubMed:11087660). Expressed in regulatory T (TReg) cells (PubMed:28607488)

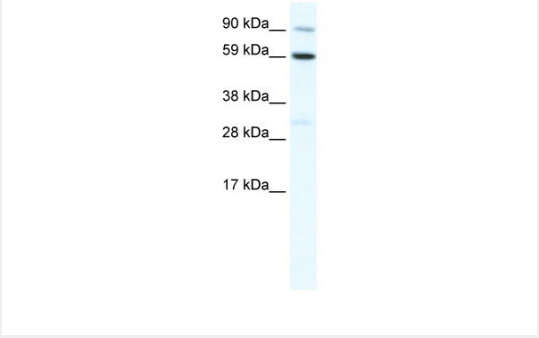
TBX21 antibody - C-terminal region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TBX21 antibody - C-terminal region - Images

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WB Suggested Anti-TBX21 Antibody Titration: 1.25µg/ml
ELISA Titer: 1:312500
Positive Control: SP2/0 cell lysate

TBX21 antibody - C-terminal region - References

Hirata,T., et al., (2006) Development 133 (8), 1433-1443Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.