

ZBTB7B Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP6370c**Specification**

ZBTB7B Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [O15156](#)**ZBTB7B Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 51043**Other Names**

Zinc finger and BTB domain-containing protein 7B, Krueppel-related zinc finger protein cKrox, hcKrox, T-helper-inducing POZ/Krueppel-like factor, Zinc finger and BTB domain-containing protein 15, Zinc finger protein 67 homolog, Zfp-67, Zinc finger protein 857B, Zinc finger protein Th-POK, ZBTB7B, ZBTB15, ZFP67, ZNF857B

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6370c](/product/products/AP6370c) was selected from the Center region of human ZBTB7B. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ZBTB7B Antibody (Center) Blocking Peptide - Protein Information**Name** ZBTB7B ([HGNC:18668](#))**Synonyms** ZBTB15, ZFP67, ZNF857B**Function**

Transcription regulator that acts as a key regulator of lineage commitment of immature T-cell precursors. Exerts distinct biological functions in the mammary epithelial cells and T cells in a tissue-specific manner. Necessary and sufficient for commitment of CD4 lineage, while its absence causes CD8 commitment. Development of immature T-cell precursors (thymocytes) to either the CD4 helper or CD8 killer T-cell lineages correlates precisely with their T-cell receptor specificity for major histocompatibility complex class II or class I molecules, respectively. Cross-antagonism between ZBTB7B and CBF complexes are determinative to CD4 versus CD8 cell fate decision.

Suppresses RUNX3 expression and imposes CD4+ lineage fate by inducing the SOCS suppressors of cytokine signaling. induces, as a transcriptional activator, SOCS genes expression which represses RUNX3 expression and promotes the CD4+ lineage fate. During CD4 lineage commitment, associates with multiple sites at the CD8 locus, acting as a negative regulator of the CD8 promoter and enhancers by epigenetic silencing through the recruitment of class II histone deacetylases, such as HDAC4 and HDAC5, to these loci. Regulates the development of IL17-producing CD1d-restricted natural killer (NK) T cells. Also functions as an important metabolic regulator in the lactating mammary glands. Critical feed-forward regulator of insulin signaling in mammary gland lactation, directly regulates expression of insulin receptor substrate-1 (IRS-1) and insulin-induced Akt-mTOR-SREBP signaling (By similarity). Transcriptional repressor of the collagen COL1A1 and COL1A2 genes. May also function as a repressor of fibronectin and possibly other extracellular matrix genes (PubMed: [9370309](http://www.uniprot.org/citations/9370309)). Potent driver of brown fat development, thermogenesis and cold-induced beige fat formation. Recruits the brown fat lncRNA 1 (Blnc1):HNRNPU ribonucleoprotein complex to activate thermogenic gene expression in brown and beige adipocytes (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q64321}.

ZBTB7B Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ZBTB7B Antibody (Center) Blocking Peptide - Images**ZBTB7B Antibody (Center) Blocking Peptide - Background**

ZBTB7B is a transcription regulator that acts as a key regulator of lineage commitment of immature T-cell precursors. It is necessary and sufficient for commitment of CD4 lineage, while its absence causes CD8 commitment. Development of immature T-cell precursors (thymocytes) to either the CD4 helper or CD8 killer T-cell lineages correlates precisely with their T-cell receptor specificity for major histocompatibility complex class II or class I molecules, respectively. ZBTB7B is a transcriptional repressor of the collagen COL1A1 and COL1A2 genes. It may also function as a repressor of fibronectin and possibly other extracellular matrix genes.

ZBTB7B Antibody (Center) Blocking Peptide - References

Galera,P., Proc. Natl. Acad. Sci. U.S.A. 91 (20), 9372-9376 (1994)Widom,R.L., Gene 198 (1-2), 407-420 (1997)Heegaard,A.M., J. Bone Miner. Res. 12 (12), 2050-2060 (1997)Widom,R.L., Matrix Biol. 20 (7), 451-462 (2001)