10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ZBTB7B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16999c

Product Information

Application	WB, E
Primary Accession	O15156
Other Accession	NP_056956.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36743
Calculated MW	58027
Antigen Region	315-343

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	This ZBTB7B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 315-343 amino acids from the Central region of human ZBTB7B.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ZBTB7B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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 naural 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). 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}.

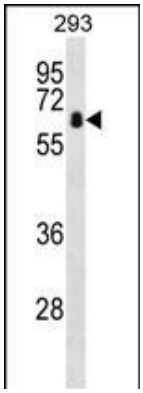
Background

ZFP67 is an early growth response gene that encodes a zinc finger-containing transcription factor that binds to the promoter regions of type I collagen genes (e.g., COL1A1; MIM 120150) and has a role in development.

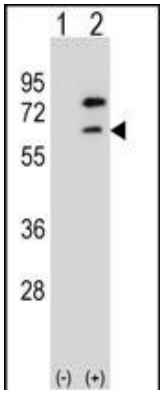
References

Zhang, M., et al. J. Immunol. 185(7):3960-3969(2010) Yerges, L.M., et al. J. Bone Miner. Res. 24(12):2039-2049(2009) Egawa, T. J. Cell. Biochem. 107(6):1037-1045(2009) Tokunaga, T., et al. Autoimmunity 42(8):653-660(2009) Renard, E., et al. J. Cell. Mol. Med. 12 (6B), 2836-2847 (2008) :

Images



ZBTB7B Antibody (Center) (Cat. #AP16999c) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the ZBTB7B antibody detected the ZBTB7B protein (arrow).



Western blot analysis of ZBTB7B (arrow) using rabbit polyclonal ZBTB7B Antibody (Center) (Cat. #AP16999c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the ZBTB7B gene.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.