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

Zbtb7a antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI11509

Product Information

Application	WB
Primary Accession	O88939
Other Accession	NM_010731, NP_034861
Reactivity	Human, Mouse, Rat, Pig, Dog, Bovine
Predicted	Mouse, Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60281

Additional Information

Gene ID	16969
Alias Symbol	9030619K07Rik, 9130006G12Rik, AI452336, FBI-1, Lrf, Pokemon, Zbtb7
Other Names	Zinc finger and BTB domain-containing protein 7A, Leukemia/lymphoma-related factor, POZ and Krueppel erythroid myeloid ontogenic factor, POK erythroid myeloid ontogenic factor, Pokemon, Zbtb7a, Lrf, Zbtb7
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Zbtb7a 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	Zbtb7a antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Zbtb7a {ECO:0000312|MGI:MGI:1335091}
Function	Transcription factor that represses the transcription of a wide range of genes involved in cell proliferation and differentiation (PubMed:15337766, PubMed:15662416, PubMed:17495164, PubMed:26816381, PubMed:29813070). Directly and specifically binds to the consensus sequence 5'-[GA][CA]GACCCCCCCCC-3' and represses transcription both by regulating the organization of chromatin and through the direct recruitment of transcription factors to gene regulatory regions (PubMed:15337766, PubMed:15662416, PubMed:26816381, PubMed:29813070). Negatively

regulates SMAD4 transcriptional activity in the TGF-beta signaling pathway through these two mechanisms (By similarity). That is, recruits the chromatin regulator HDAC1 to the SMAD4-DNA complex and in parallel prevents the recruitment of the transcriptional activators CREBBP and EP300 (By similarity). Collaborates with transcription factors like RELA to modify the accessibility of gene transcription regulatory regions to secondary transcription factors (PubMed:29813070). Also directly interacts with transcription factors like SP1 to prevent their binding to DNA (By similarity). Functions as an androgen receptor/AR transcriptional corepressor by recruiting NCOR1 and NCOR2 to the androgen response elements/ARE on target genes (By similarity). Thereby, negatively regulates androgen receptor signaling and androgen-induced cell proliferation (By similarity). Involved in the switch between fetal and adult globin expression during erythroid cells maturation (PubMed:26816381). Through its interaction with the NuRD complex regulates chromatin at the fetal globin genes to repress their transcription (PubMed:26816381). Specifically represses the transcription of the tumor suppressor ARF isoform from the CDKN2A gene (PubMed:15662416). Efficiently abrogates E2F1-dependent CDKN2A transactivation (PubMed:15662416). Regulates chondrogenesis through the transcriptional repression of specific genes via a mechanism that also requires histone deacetylation (PubMed:15337766). Regulates cell proliferation through the transcriptional regulation of genes involved in glycolysis (By similarity). Involved in adipogenesis through the regulation of genes involved in adipocyte differentiation (By similarity). Plays a key role in the differentiation of lymphoid progenitors into B and T lineages (PubMed:17495164). Promotes differentiation towards the B lineage by inhibiting the T-cell instructive Notch signaling pathway through the specific transcriptional repression of Notch downstream target genes (PubMed:17495164). Also regulates osteoclast differentiation (By similarity). May also play a role, independently of its transcriptional activity, in double-strand break repair via classical non-homologous end joining/cNHEJ (PubMed:26446488). Recruited to double-strand break sites on damage DNA, interacts with the DNA-dependent protein kinase complex and directly regulates its stability and activity in DNA repair (PubMed:26446488). May also modulate the splicing activity of KHDRBS1 toward BCL2L1 in a mechanism which is histone deacetylase-dependent and thereby negatively regulates the pro-apoptotic effect of KHDRBS1 (By similarity).

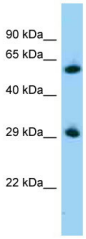
Cellular Location

Nucleus. Note=Recruited to double-strand break sites of damaged DNA.

Tissue Location

Widely expressed (PubMed:9927193). In normal thymus, expressed in medullary epithelial cells and Hassle's corpuscles (at protein level) (PubMed:15662416). In the spleen, mainly expressed in the white pulp germinal centers (at protein level) (PubMed:15662416). Up-regulated in thymic lymphomas (PubMed:15662416)

Images



WB Suggested Anti-Zbtb7a Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Pancreas

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