

Zbtb7a antibody - C-terminal region Rabbit Polyclonal Antibody

Catalog # Al11509

Specification

Zbtb7a antibody - C-terminal region - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Calculated MW WB <u>O88939</u> <u>NM_010731</u>, <u>NP_034861</u> Human, Mouse, Rat, Pig, Bovine, Dog Mouse, Rat, Bovine, Dog Rabbit Polyclonal 60kDa KDa

Zbtb7a antibody - C-terminal region - Additional Information

Gene ID 16969

Alias Symbol

9030619K07Rik, 9130006G12Rik, Al452336, 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.

Zbtb7a antibody - C-terminal region - Protein Information

Name Zbtb7a {ECO:0000312|MGI:MGI:1335091}

Function

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Transcription factor that represses the transcription of a wide range of genes involved in cell proliferation and differentiation (PubMed:<a href="http://www.uniprot.org/citations/15337766" target="_blank">15337766</a>, PubMed:<a href="http://www.uniprot.org/citations/15662416" target="_blank">15662416</a>, PubMed:<a href="http://www.uniprot.org/citations/17495164" target="_blank">15662416</a>, PubMed:<a href="http://www.uniprot.org/citations/17495164" target="_blank">17495164</a>, PubMed:<a href="http://www.uniprot.org/citations/17495164" target="_blank">26816381</a>, PubMed:<a href="http://www.uniprot.org/citations/26816381" target="_blank">26816381</a>, PubMed:<a href="http://www.uniprot.org/citations/29813070"</a>
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target="_blank">29813070). Directly and specifically binds to the consensus sequence 5'-[GA][CA]GACCCCCCC-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 and rogen receptor signaling and and rogen-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)

Zbtb7a antibody - C-terminal region - Protocols



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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Zbtb7a antibody - C-terminal region - Images



Positive Control: Mouse Pancreas