

ZBTB7A Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP14208b**Specification**

ZBTB7A Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [O95365](#)**ZBTB7A Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 51341

Other Names

Zinc finger and BTB domain-containing protein 7A, Factor binding IST protein 1, FBI-1, Factor that binds to inducer of short transcripts protein 1, HIV-1 1st-binding protein 1, Leukemia/lymphoma-related factor, POZ and Krueppel erythroid myeloid ontogenic factor, POK erythroid myeloid ontogenic factor, Pokemon, TTF-I-interacting peptide 21, TIP21, Zinc finger protein 857A, ZBTB7A, FBI1, LRF, ZBTB7, ZNF857A

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.

ZBTB7A Antibody (C-term) Blocking Peptide - Protein InformationName ZBTB7A ([HGNC:18078](#))**Function**

Transcription factor that represses the transcription of a wide range of genes involved in cell proliferation and differentiation (PubMed: [14701838](http://www.uniprot.org/citations/14701838), PubMed: [17595526](http://www.uniprot.org/citations/17595526), PubMed: [20812024](http://www.uniprot.org/citations/20812024), PubMed: [25514493](http://www.uniprot.org/citations/25514493), PubMed: [26455326](http://www.uniprot.org/citations/26455326), PubMed: [26816381](http://www.uniprot.org/citations/26816381)). Directly and specifically binds to the consensus sequence 5'-[GA][CA]GACCCCCCCC-3' and represses transcription both by regulating the organization of chromatin and through the direct recruitment of transcription factors to gene regulatory regions (PubMed: [12004059](http://www.uniprot.org/citations/12004059), PubMed: [17595526](http://www.uniprot.org/citations/17595526), PubMed: [20812024](http://www.uniprot.org/citations/20812024), PubMed: [25514493](http://www.uniprot.org/citations/25514493)).

PubMed:26816381). Negatively regulates SMAD4 transcriptional activity in the TGF-beta signaling pathway through these two mechanisms (PubMed:25514493). 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 (PubMed:25514493). Collaborates with transcription factors like RELA to modify the accessibility of gene transcription regulatory regions to secondary transcription factors (By similarity). Also directly interacts with transcription factors like SP1 to prevent their binding to DNA (PubMed:12004059). Functions as an androgen receptor/AR transcriptional corepressor by recruiting NCOR1 and NCOR2 to the androgen response elements/ARE on target genes (PubMed:20812024). Thereby, negatively regulates androgen receptor signaling and androgen- induced cell proliferation (PubMed:20812024). 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 (By similarity). Efficiently abrogates E2F1-dependent CDKN2A transactivation (By similarity). Regulates chondrogenesis through the transcriptional repression of specific genes via a mechanism that also requires histone deacetylation (By similarity). Regulates cell proliferation through the transcriptional regulation of genes involved in glycolysis (PubMed:26455326). Involved in adipogenesis through the regulation of genes involved in adipocyte differentiation (PubMed:14701838). Plays a key role in the differentiation of lymphoid progenitors into B and T lineages (By similarity). 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 (By similarity). 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 (By similarity). 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 (By similarity). 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 (PubMed:24514149).

Cellular Location

Nucleus. Note=Recruited to double-strand break sites of damaged DNA.
{ECO:0000250|UniProtKB:O88939}

Tissue Location

Widely expressed (PubMed:9927193). In normal thymus, expressed in medullary epithelial cells and Hassle's corpuscles (at protein level) (PubMed:15662416). In tonsil, expressed in squamous epithelium and germinal center lymphocytes (at protein level) (PubMed:15662416). Up-regulated in a subset of lymphomas, as well as in a subset of breast, lung, colon, prostate and bladder carcinomas (at protein level) (PubMed:15662416). Expressed in adipose tissues (PubMed:14701838).

ZBTB7A Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ZBTB7A Antibody (C-term) Blocking Peptide - Images**ZBTB7A Antibody (C-term) Blocking Peptide - Background**

ZBTB7A plays a key role in the instruction of early lymphoid progenitors to develop into B lineage by repressing T-cell instructive Notch signals (By similarity). Specifically represses the transcription of the CDKN2A gene. Efficiently abrogates E2F1-dependent CDKN2A transactivation/de-repression. Binds to the consensus sequence 5'-[GA][CA]GACCCCCCCCC-3' (By similarity).

ZBTB7A Antibody (C-term) Blocking Peptide - References

Qu, H., et al. Cancer Invest. 28(6):672-678(2010)Zu, X., et al. Cell. Mol. Biol. Lett. 15(2):260-271(2010)Cui, J., et al. Mol. Biol. Rep. 37(3):1627-1632(2010)Choi, W.I., et al. J. Biol. Chem. 284(19):12633-12644(2009)Choi, W.I., et al. Cell. Physiol. Biochem. 23 (4-6), 359-370 (2009)
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