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PBX1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7285a

Specification

PBX1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P40424

PBX1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 5087

Other Names
Pre-B-cell leukemia transcription factor 1, Homeobox protein PBX1, Homeobox protein PRL, PBX1, PRL

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7285a was selected from the N-term region of human PBX1. 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.

PBX1 Antibody (N-term) Blocking Peptide - Protein Information

Name PBX1

PBX1 Antibody (N-term) Blocking Peptide - Background

PBX1 binds the sequence 5'-ATCAATCAA-3'. It acts as a transcriptional activator of PF4 in complex with MEIS1, and is converted into a potent transcriptional activator by the (1;19) translocation. It may have a role in steroidogenesis and, subsequently, sexual development and differentiation.

PBX1 Antibody (N-term) Blocking Peptide - References

Duesing,K., BMC Med. Genet. 9, 14 (2008)Chung,E.Y., Immunity 27 (6), 952-964 (2007)Qiu,Y., Am. J. Pathol. 170 (1), 152-159 (2007)

Synonyms PRL

Function
Transcription factor which binds the DNA sequence 5'- TGATTGAT-3' as part of a heterodimer with HOX proteins such as HOXA1, HOXA5, HOXB7 and HOXB8 (PubMed:9191052). Binds to the DNA sequence 5'- TGATTGAC-3' in complex with a nuclear factor which is not a class I HOX protein (PubMed:9191052). Has also been shown to bind the DNA sequence 5'-ATCAATCAA-3' cooperatively with HOXA5, HOXB7, HOXB8, HOXC8 and HOXD4 (PubMed:8327485, PubMed:7791786). Acts as a transcriptional activator of PF4 in complex with MEIS1 (PubMed:12609849). Also activates transcription of SOX3 in complex with MEIS1 by binding to the 5'-TGATTGAC-3' consensus sequence (By similarity). In natural killer cells, binds to the NFIL3 promoter and acts as a transcriptional activator of NFIL3, promoting natural killer cell development (By similarity). Plays a role in the cAMP-dependent regulation of CYP17A1 gene expression via its cAMP-regulatory sequence (CRS1) (By similarity). Probably in complex with MEIS2, involved in transcriptional regulation by KLF4 (PubMed:21746878). Acts as a transcriptional activator of NKX2-5 and a transcriptional repressor of CDKN2B (By similarity). Together with NKX2-5, required for spleen development through a mechanism that involves CDKN2B repression (By similarity).

Cellular Location
Nucleus.

Tissue Location
Expressed in the kidney. Expressed in the endothelial cells of the glomeruli and

interstitium (at protein level) (PubMed:28270404). Expressed in all tissues except in cells of the B and T lineage. Expressed strongly in kidney and brain (PubMed:28270404).

PBX1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides