

PBX1 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3213a

Specification

PBX1 Antibody (internal region) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB <u>P40424</u> <u>NP_002576.1, 5087, 18514 (mouse)</u> Human, Mouse, Rat Dog Goat Polyclonal 0.5 mg/ml IgG 46626

PBX1 Antibody (internal region) - Additional Information

Gene ID 5087

Other Names

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

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PBX1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

PBX1 Antibody (internal region) - Protein Information

Name PBX1

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 (internal 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>

PBX1 Antibody (internal region) - Images



	250kDa 150kDa		
	100kDa		
	75kDa		
-	50kDa		
38	37kDa		
	25kDa		
	20kDa		
	15kDa		

AF3213a (0.5 μ g/ml) staining of K562 lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF3213a (0.5 μ g/ml) staining of Mouse Eye lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

PBX1 Antibody (internal region) - References

Gfi1 integrates progenitor versus granulocytic transcriptional programming. Horman SR, Velu CS, Chaubey A, Bourdeau T, Zhu J, Paul WE, Gebelein B, Grimes HL. Blood 2009 May 113 (22): 5466-75. PMID: 19346496