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Store at -20C
#4342

Pbx1 Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP, IF-IC	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 42, 52	Source/Isotype: Rabbit	UniProt ID: #P40424	Entrez-Gene Id: 5087
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Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:100
1:400

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Pbx1 Antibody detects endogenous levels of total Pbx1a and Pbx1b proteins.

Species predicted to react based on 100% sequence homology

Rat

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly29 of human Pbx1 protein. Antibodies are purified by protein A and peptide affinity chromatography

Background

The Pbx (Pre-B cell leukemia transcription factors) belong to the Three Amino Acid Loop Extension (TALE) family of homeodomain containing protein (1). Pbx1 has two isoforms, Pbx1a and 1b, that are divergent in sequence at the carboxy terminus, which is a result of alternative mRNA splicing. Unlike other homeoselector genes that have restricted expression in development Pbx genes are ubiquitously expressed in both fetal and adult tissue (1). Human pre-B cell acute leukemias are frequently associated with a t(1;19)(q23;p13.3) translocation that results in a fusion between the E2A and Pbx1 genes (2,3). Pbx1 genes are not normally expressed in lymphoid tissues, and the E2A-Pbx1 fusion protein is a potent transcription factor that drives aberrant gene expression.

Background References

1. Moens, C.B. and Selleri, L. (2006) *Dev. Biol.* 291, 193-206.
2. Kamps, M.P. et al. (1990) *Cell* 60, 547-555.
3. Lu, Q. et al. (1994) *Mol. Cell Biol.* 14, 3938-3948.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human **M:** Mouse

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