Data Sheet (Cat.No.TMAB-10030)

Anti-PBX1 Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat (predicted:Chicken,Dog,Cow,Horse,Rabbit,Zebrafish)
Molecular Weight:	Theoretical: 47 kDa. Actual: 50 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	Sample: Lane 1: Mouse Testis tissue lysates Lane 2: Rat Testis tissue lysates Lane 3: Human HeLa cell lysates Lane 4: Human A431 cell lysates Lane 5: Human A549 cell lysates Primary: Anti-PBX1 (TMAB-10030) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 47 kDa Observed band size: 50 kDa
Application:	WB
Recommended	WB: 1:500-2000

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: Human PBX1
Antigen Species:	Human
Gene ID:	5087
Uniprot ID:	P40424

Research Background

Pbx 1, 2, 3 and 4 are members of the TALE (three amino acid loop extension) family of homeodomain-containing proteins. Human pre-B cell acute leukemias are frequently associated with a t(1;19)(q23;p13.3) chromosomal rearrangement, which creates a chimeric gene encoding a fusion between the E2A and Pbx 1 gene products. Pbx 2 and Pbx 3 share 92% and 94% respective identities with Pbx 1 over a 266 amino acid region flanking their homeobox domains, while all three proteins are quite divergent at their amino- and carboxy-termini. Two forms of Pbx 1 and Pbx 3 each differ primarily in their carboxy-termini and result from alternative mRNA splicing. Unlike other homeotic selector genes which are expressed transiently during development and differentiation, Pbx gene transcripts are ubiquitously expressed in both fetal and adult tissues and cell lines. Additionally, Pbx 2 and Pbx 3 transcripts are detected in lymphoid cells, which do not express Pbx 1. Pbx 4 expression is confined to the testis, especially to

spermatocytes in the pachytene stage of the first meiotic prophase.