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SPI1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8640b

Product Information

Application	WB, E
Primary Accession	P17947
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Chicken
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1835CT291.10.52
Calculated MW	31083

Additional Information

Gene ID	6688
Other Names	Transcription factor PU.1, 31 kDa-transforming protein, SPI1
Target/Specificity	This SPI1 antibody is generated from a mouse immunized with a recombinant protein of human SPI1.
Dilution	WB~~1:500-1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SPI1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SPI1
Function	Pioneer transcription factor, which controls hematopoietic cell fate by decompacting stem cell heterochromatin and allowing other transcription factors to enter otherwise inaccessible genomic sites. Once in open chromatin, can directly control gene expression by binding genetic regulatory elements and can also more broadly influence transcription by recruiting transcription factors, such as interferon regulatory factors (IRFs), to otherwise

	inaccessible genomic regions (PubMed:23658224, PubMed:33951726). Transcriptionally activates genes important for myeloid and lymphoid lineages, such as CSF1R (By similarity). Transcriptional activation from certain promoters, possibly containing low affinity binding sites, is achieved cooperatively with other transcription factors. FCER1A transactivation is achieved in cooperation with GATA1 (By similarity). May be particularly important for the pro- to pre-B cell transition (PubMed:33951726). Binds (via the ETS domain) onto the purine-rich DNA core sequence 5'-GAGGAA-3', also known as the PU-box (PubMed:33951726). In vitro can bind RNA and interfere with pre-mRNA splicing (By similarity).
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00237, ECO:0000269|PubMed:33951726}
Tissue Location	In the bone marrow, concentrated in hematopoietic stem cell, lymphoid progenitor, myeloid lineage (granulocyte macrophage progenitors, classical dendritic cells, monocytes) and B-cell clusters Among B-cells, predominantly expressed in pre-B1 cells (PubMed:33951726). Expressed in germinal center B-cells (PubMed:23166356).

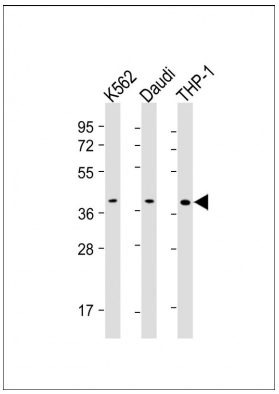
Background

Binds to the PU-box, a purine-rich DNA sequence (5'- GAGGAA-3') that can act as a lymphoid-specific enhancer. This protein is a transcriptional activator that may be specifically involved in the differentiation or activation of macrophages or B- cells. Also binds RNA and may modulate pre-mRNA splicing (By similarity).

References

Ray D.,et al.Oncogene 5:663-668(1990).
Ray D.,et al.Oncogene 5:1611-1612(1990).
Li W.B.,et al.Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
Taylor T.D.,et al.Nature 440:497-500(2006).
Rao S.,et al.J. Biol. Chem. 274:11115-11124(1999).

Images



All lanes : Anti-SPI1 Antibody at 1:500-1:1000 dilution Lane 1: K562 whole cell lysate Lane 2: Daudi whole cell lysate Lane 3: THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.