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SPI1 antibody

Rabbit mAb
Catalog # AP91853

Product Information

Application	WB, IHC, FC
Primary Accession	P17947
Reactivity	Human
Clonality	Monoclonal
Other Names	oncogene spi1; PU.1; SFPI1; SPI 1; SPI A; Spi1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	31083

Additional Information

Dilution	WB 1:1000~1:5000 IHC 1:50~1:200 FC 1:60
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PU.1/Spi1
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

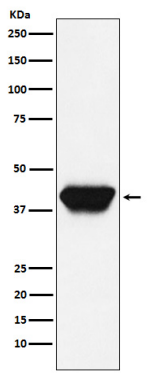
Cellular Location

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).

Images



Western blot analysis of PU.1/Spi1 expression in Daudi cell lysate.