

SPI1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP14850b

Specification

SPI1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

P17947

SPI1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 6688

Other Names

Transcription factor PU1, 31 kDa-transforming protein, SPI1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SPI1 Antibody (C-term) Blocking Peptide - 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).

SPI1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

SPI1 Antibody (C-term) Blocking Peptide - Images

SPI1 Antibody (C-term) Blocking Peptide - Background

This gene encodes an ETS-domain transcription factor thatactivates gene expression during myeloid and B-lymphoid celldevelopment. The nuclear protein binds to a purine-rich sequenceknown as the PU-box found near the promoters of target genes, andregulates their expression in coordination with other transcriptionfactors and cofactors. The protein can also regulate alternativesplicing of target genes. Multiple transcript variants encodingdifferent isoforms have been found for this gene. [provided byRefSeq].

SPI1 Antibody (C-term) Blocking Peptide - References

Rimmele, P., et al. Cancer Res. 70(17):6757-6766(2010)Bonadies, N., et al. Oncogene 29(7):1062-1072(2010)Bonadies, N., et al. Blood 115(2):331-334(2010)Desai, S., et al. J. Immunol. 183(9):5778-5787(2009)Burda, P., et al. Mol. Cancer Res. 7(10):1693-1703(2009)