

PU.1 Polyclonal Antibody

Catalog # AP72089

Specification

PU.1 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IF <u>P17947</u> Human, Mouse, Rat, Monkey Rabbit Polyclonal

PU.1 Polyclonal Antibody - Additional Information

Gene ID 6688

Other Names SPI1; Transcription factor PU.1; 31 kDa-transforming protein

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

PU.1 Polyclonal Antibody - 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" target="_blank">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

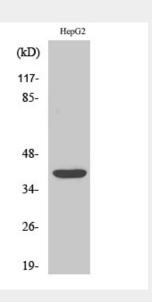
In the bone marrow, concentrated in hematopoietic stem cell, lymphoid progenitor, myeloid lineage (granulocyte macrophage progenitors, classical dendritic cells, monocytes) and B-cell clusters Among B-cells, predominantly expressed in pre-B1 cells (PubMed:33951726). Expressed in germinal center B-cells (PubMed:23166356).

PU.1 Polyclonal Antibody - Protocols

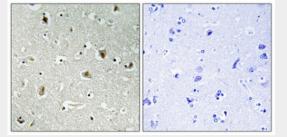
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PU.1 Polyclonal Antibody - Images







PU.1 Polyclonal Antibody - 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).