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SPIB Antibody

Catalog # ASC11917

Product Information

Application	WB, IHC, E
Primary Accession	Q01892
Other Accession	NP_003112, 61888836
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	28819
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SPIB antibody can be used for detection of SPIB by Western blot at 1 - 2 g/ml. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL.

Additional Information

Gene ID	6689
Other Names	Transcription factor Spi-B, SPIB
Target/Specificity	SPIB; SPIB antibody is human, mouse and rat reactive. At least four isoforms of SPIB are known to exist; this antibody will detect all but isoform 3.
Reconstitution & Storage	SPIB antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	SPIB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SPIB
Function	Sequence specific transcriptional activator which binds to the PU-box, a purine-rich DNA sequence (5'-GAGGAA-3') that can act as a lymphoid-specific enhancer. Promotes development of plasmacytoid dendritic cells (pDCs), also known as type 2 DC precursors (pre-DC2) or natural interferon (IFN)-producing cells. These cells have the capacity to produce large amounts of interferon and block viral replication. May be required for B-cell receptor (BCR) signaling, which is necessary for normal B-cell development and antigenic stimulation.
Cellular Location	[Isoform 1]: Nucleus

Tissue Location	Expressed in plasmacytoid dendritic cells (pDCs) and B-cells, not expressed in T-cells or granulocytes. May also be enriched in stem cell populations of the liver

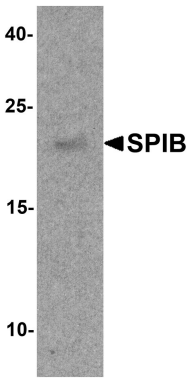
Background

SPIB is a member of the ETS transcription factor family that influences lymphoid development and activity and binds the consensus DNA site GGA (A/T) through a unique winged helix-turn-helix motif known as the ETS domain (1). SPIB is found in hematopoietic cells such as B cells and plasmacytoid dendritic cells (DC) (2,3). It promotes the development of plasmacytoid dendritic cells (pDCs) or natural interferon (IFN)-producing cells. SPIB may be required for B-cell receptor (BCR) signaling, which is necessary for normal B-cell development and antigenic stimulation (3,4).

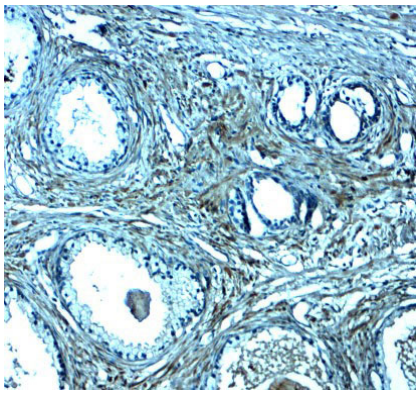
References

Ray D, Bosselut R, Ghysdael J, et al. Characterization of Spi-B, a transcription factor related to the putative oncoprotein Spi-1/PU.1. Mol. Cell Biol. 1992; 12:4297-304.
Nagy M, Chapuis B, and Matthes T. Expression of transcription factors Pu.1, Spi-B, Blimp-1, BSAP and oct-2 in normal human plasma cells and in multiple myeloma cells. Br. J. Haematol. 2002; 116:429-35.
Schotte R, Rissoan MC, Bendriss-Vermare N, et al. The transcription factor Spi-B is expressed in plasmacytoid DC precursors and inhibits T-, B-, and NK-cell development. Blood 2003; 101:1015-23.
Schotte R, Nagasawa M, Weijer K, et al. The ETS transcription factor Spi-B is required for human plasmacytoid dendritic cell development. J. Exp. Med. 2004; 200:1503-9.

Images



Western blot analysis of SPIB in human prostate tissue lysate with SPIB antibody at 1 µg/ml.



Immunohistochemistry of SPIB in human prostate tissue with SPIB antibody at 2.5 µg/mL.