

PE anti-SPI1 (PU.1) Antibody

Catalog# / Size	658009 / 25 tests 658010 / 100 tests
Clone	7C6B05
Regulatory Status	RUO
Other Names	Spleen focus forming virus (SFFV) proviral integration oncogene, Transcription factor PU.1
Isotype	Mouse IgG1, κ
Description	SPI1 is a transcription factor belonging to the E26-transformation-specific (Ets) family and is exclusively expressed in hematopoietic cells. SPI1 regulates cell fate decisions during differentiation of hematopoietic stem cells, which is crucial for the development of lymphoid and myeloid cell lineages. SPI1-deficient mice lack macrophages, neutrophils, and B lymphocytes, and they die before or shortly after birth. Abnormally regulated expression of SPI1 can lead to developmental defects as well as occurring malignancy. Overexpression of SPI1 blocks erythroid differentiation and inhibits cell death. Mice carrying a mutant SPI1 allele show decreased SPI1 expression and develop acute myeloid leukaemia (AML), suggesting the role of SPI1 in oncogenesis.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Full length human SPI1 recombinant protein
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Nuclear™ Transcription Factor Staining Protocol .
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	NOTE: For flow cytometric staining with this clone, True-Nuclear™ Transcription Factor Buffer Set (Cat. No. 424401) offers improved staining and is highly recommended.
Product Citations	1. Nott A, <i>et al.</i> 2021. Nature Protocols. 16(3):1629-1646. PubMed
RRID	AB_2616862 (BioLegend Cat. No. 658009) AB_2616863 (BioLegend Cat. No. 658010)

Antigen Details

Structure	270 amino acids, predicted molecular weight of 31 kD; contains a C-terminal ETS domain responsible for DNA binding.
------------------	---

Distribution	Nucleus.
Function	SPI1 is a transcription factor required for the development of lymphoid and myeloid cells.
Interaction	SPI1 interacts with RUNX1, CEBPD, NONO, SPIB, and GF11.
Cell Type	B cells, Dendritic cells, Neutrophils
Biology Area	Cell Biology, Immunology, Transcription Factors
Molecular Family	Nuclear Markers
Antigen References	<ol style="list-style-type: none"> 1. Hikami K, <i>et al.</i> 2011. <i>Arthritis Rheum.</i> 63:755. 2. Zakrzewska A, <i>et al.</i> 2010. <i>Blood</i> 116:e1. 3. Pham TH, <i>et al.</i> 2013. <i>Nucleic Acids Res.</i> 41:6391. 4. Pospisil V, <i>et al.</i> 2011. <i>EMBO J.</i> 30:4450. 5. Zarnegar MA, <i>et al.</i> 2010. <i>Mol. Cell Biol.</i> 30:4922. 6. Rimmelé P, <i>et al.</i> 2010. <i>Cancer Res.</i> 70:6757.
Gene ID	6688

Related Protocols

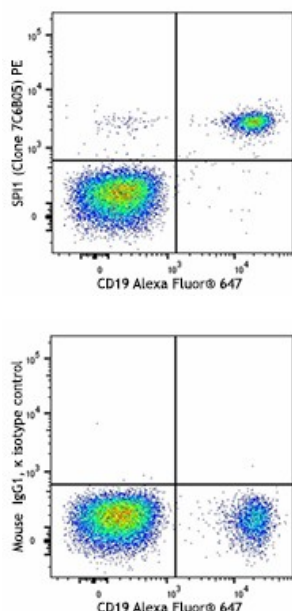
[True-Nuclear™ Transcription Factor Staining Protocol for 96-Well U Bottom Plate](#)

[True-Nuclear™ Transcription Factor Staining Protocol for 5mL Tubes](#)

Other Formats

Alexa Fluor® 647 anti-SPI1 (PU.1), Purified anti-SPI1 (PU.1), Alexa Fluor® 594 anti-SPI1 (PU.1), PE anti-SPI1 (PU.1), Alexa Fluor® 488 anti-SPI1 (PU.1), PE/Cyanine7 anti-SPI1 (PU.1), APC anti-SPI1 (PU.1)

Product Data



Human peripheral blood lymphocytes were surface stained with CD19 Alexa Fluor® 647 and then treated with True-Nuclear™ Transcription Factor Buffer Set. Cells were then stained with anti-human SPI1 (clone 7C6B05) PE (top) or mouse IgG1, κ PE isotype control (bottom).

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all

applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587