Human PU.1/Spi-1
Alexa Fluor® 700-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 732322

Catalog Number: IC5870N

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PU.1/Spi-1 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) Spi-B, recombinant mouse (rm) PU.1/Spi-1, or rmSpi-B is observed. In Western blots, approximately 25% cross-reactivity with rhSpi-B and rmPU.1/Spi-1 is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 732322
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human PU.1/Spi-1 Met1-Lys169 Accession # NP_001074016
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10^6 cells	THP-1 human acute monocytic leukemia cell line fixed with paraformaldehyde and permeabilized with saponin

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

PU.1 (Purine-rich nucleic acid binding protein 1; also 31 kDa transforming protein and SPI-1) is a member of the PU subfamily, ETS family of transcription factors. Although its predicted MW is 31 kDa, it appears to run anomalously high in SDS-PAGE at 40-45 kDa. PU.1 is a monomeric hematopoietic protein that regulates the differentiation of early myeloid and lymphoid progenitors. High PU.1 levels favor granulocyte and macrophage production, while low levels generate magakaryocytes, erythrocytes, T and B cells. Human PU.1 is 270 amino acids (aa) in length. It contains an N-terminal acidic/polyGln transactivation region (aa 34-99), a non-destabilizing PEST sequence (aa 117-165) and a C-terminal Ets DNA-binding domain (aa 170-253). PU.1 is phosphorylated on Ser146, allowing it to bind to Pip. Over aa 1-169, human PU.1 shares 88% aa identity with mouse PU.1.

PRODUCT SPECIFIC NOTICES

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