

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	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.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 732322
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PU.1/Spi-1 Met1-Lys169 Accession # NP_001074016
<b>Conjugate</b>	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
<b>Formulation</b>	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
<b>Intracellular Staining by Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	THP-1 human acute monocytic leukemia cell line fixed with paraformaldehyde and permeabilized with saponin

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

#### 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 megakaryocytes, 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-stabilizing 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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.