

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse PU.1/Spi-1 in ELISAs. In direct ELISAs, no cross-reactivity with recombinant human PU.1/Spi-1 is observed. Detects mouse and rat PU.1/Spi-1 in Western Blots
Source	Monoclonal Rat IgG _{2A} Clone # 823123
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse Spi-1 Met1-Lys169 Accession # P17433
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

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

Spi-1 (SFFV proviral integration 1 protein; also PU.1 and Sfp1) is a 37-41 kDa member of the *ets* family of transcription factors. It is both an RNA and DNA binding protein that is found in hematopoietic cells such as B cells, neutrophils, macrophages and dendritic cells (DC). Spi-1 can act as both a transcriptional activator and repressor. In DC, Spi-1 promotes the expression of CD80, CD86 and CD11b, while in proerythroblasts it blocks GATA-1 induced transcriptional activation. Spi-1 binds to DNA as a monomer and interacts with multiple factors such as Runx-1, IRF8, GATA-1 and c-Jun. Mouse Spi-1 is 272 amino acids (aa) in length. It contains a transactivation region (aa 7-117), a PEST domain (aa 118-164), and a DNA-binding domain (aa 165-266). Phosphorylation on Ser41, 142 and 148 increases activity. There is one alternative start site at Met7. Over aa 1-169, mouse Spi-1 shares 88% and 81% aa identity with rat and human Spi-1, respectively.

PRODUCT SPECIFIC NOTICES

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