

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse PU.1/Spi-1 in direct ELISAs and Western blots. In direct ELISAs, approximately 30% cross-reactivity with recombinant human Spi-1 is observed, and less than 1% cross-reactivity with recombinant mouse Spi-B is observed.                                     |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant mouse PU.1/Spi-1<br>Met1-Lys169<br>Accession # P17433                                                                                                                                                                                   |
| <b>Conjugate</b>          | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

## 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

Spi1 (SFV proviral integration 1 protein; also PU.1 and Sp1) 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). Spi1 can act as both a transcriptional activator and repressor. In DC, Spi1 promotes the expression of CD80, CD86 and CD11b, while in proerythroblasts, it blocks GATA-1 induced transcriptional activation. Spi1 binds to DNA as a monomer, and interacts with multiple factors such as Runx-1, IRF8, GATA-1 and c-Jun. Mouse Spi1 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 Spi1 shares 88% and 81% aa identity with rat and human Spi1, respectively.

## PRODUCT SPECIFIC NOTICES

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