

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Spi-B in direct ELISAs. In direct ELISAs, less than 2% cross-reactivity with recombinant human 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 Spi-B Tyr18-Glu167 (Tyr110Phe) Accession # O35906
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

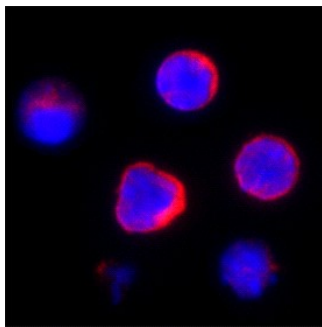
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Intracellular Staining by Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

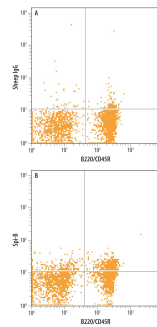
## DATA

### Immunocytochemistry



**Spi-B in Mouse Splenocytes.** Spi-B was detected in immersion fixed mouse splenocytes using Sheep Anti-Mouse Spi-B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7204) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to plasma membranes and cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

### Intracellular Staining by Flow Cytometry



**Detection of SPI-B in Mouse Splenocytes by Flow Cytometry.** Mouse splenocytes were stained with Sheep Anti-Mouse Spi-B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7204) followed by Allophycocyanin-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # F0127) and Rat Anti-Mouse B220/CD45R PE-conjugated Monoclonal Antibody (Catalog # FAB1217P). Quadrant markers were set based on control antibody staining (Catalog # 5-001-A). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Spi-B (Transcription factor Spi-B) is a 33-45 kDa member of the ets family of transcription factors. It is found in hematopoietic cells such as B cells and plasmacytoid dendritic cells (DC). In transitional B cells, Spi-B promotes their differentiation into follicular (naïve) B cells. In hematopoietic stem cells, Spi-B stimulates the generation of IFN-producing plasmacytoid DC at the expense of T, B and NK cell development. Mouse Spi-B is 267 amino acids (aa) in length. It contains a dual transactivation region (aa 1-62), plus a PEST domain (aa 110-170) and an Ets DNA-binding domain (aa 174-257). There are two isoform variants. One shows a nine aa substitution for aa 1-8, while a second possesses an 18 aa insertion after Leu17. Over aa 18-167, mouse Spi-B shares 91% and 74% aa identity with rat and human Spi-B, respectively.