

Store at  
-20°C  
#14337**Spi-B (D4V9S) Rabbit mAb**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---------------|-------------|--------------|-----------|-----------------|-------------|-----------------|
| W, IP         | H M         | Endogenous   | 44        | Rabbit IgG      | #Q01892     | 6689            |

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation

**Dilution**

1:1000  
1:100

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

**Specificity/Sensitivity**

Spi-B (D4V9S) Rabbit mAb recognizes endogenous levels of total Spi-B protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human Spi-B protein.

**Background**

Spi-B belongs to the ETS family of transcription factors and activates transcription through direct binding to the PU box (1). Spi-B was identified based on its homology with PU.1/Spi-I (1). The function of Spi-B is most well studied in B cells and plasmacytoid dendritic cells (pDCs). B cells from mice deficient in Spi-B proliferate poorly and die in response to signaling through the B cell receptor (2). In addition, Spi-B<sup>-/-</sup> mice have a defect in germinal center formation (2). Spi-B plays a role in both the development and function of pDCs. It is highly expressed by pDCs and not by monocyte-derived DCs, and overexpression of Spi-B in hematopoietic progenitor cells inhibits development of other lymphoid lineages (3). pDCs from Spi-B<sup>-/-</sup> mice produce less interferon in response to TLR7 and TLR9 stimulation and have lower expression of pDC-specific surface markers (4). Finally, Spi-B is required for differentiation of intestinal microfold cells (5,6).

**Background References**

1. Ray, D. et al. (1992) *Mol Cell Biol* 12, 4297-304.
2. Su, G.H. et al. (1997) *EMBO J* 16, 7118-29.
3. Schotte, R. et al. (2003) *Blood* 101, 1015-23.
4. Sasaki, I. et al. (2012) *Blood* 120, 4733-43.
5. Kanaya, T. et al. (2012) *Nat Immunol* 13, 729-36.
6. de Lau, W. et al. (2012) *Mol Cell Biol* 32, 3639-47.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation

**Cross-Reactivity Key**

**H:** Human **M:** Mouse

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