

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human BLIMP1/PRDM1 in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 646702
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human BLIMP1/PRDM1 Lys667-Cys789 Accession # O75626
<b>Conjugate</b>	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
<b>Formulation</b>	Supplied 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.

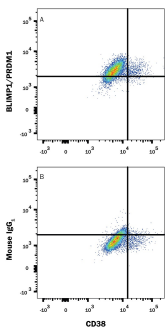
**APPLICATIONS**

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Intracellular Staining by Flow Cytometry</b>	5 µL/10 <sup>6</sup> cells	See Below

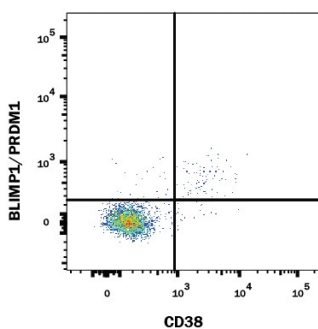
**DATA**

**Intracellular Staining by Flow Cytometry**



**Detection of BLIMP1/PRDM1 in U266 Human Cell Line by Flow Cytometry.** U266 human myeloma cell line was stained with Mouse Anti-Human CD38 PE-conjugated Monoclonal Antibody (Catalog # FAB2404P) and either (A) Mouse Anti-Human BLIMP1/PRDM1 Alexa Fluor® 647-conjugated Monoclonal Antibody (Catalog # IC36081R) or (B) Mouse IgG<sub>1</sub> Alexa Fluor 647 Isotype Control (Catalog # IC002R). To facilitate intracellular staining, cells were fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012). View our protocol for [Staining Intracellular Molecules](#).

**Intracellular Staining by Flow Cytometry**



**Detection of BLIMP1/PRDM1 in Human PBMCs gated on CD19<sup>+</sup> CD3<sup>-</sup> cells by Flow Cytometry.** Human peripheral blood mononuclear cells (PBMCs) gated on CD19<sup>+</sup> CD3<sup>-</sup> cells were stained with Mouse Anti-Human BLIMP1/PRDM1 Alexa Fluor® 647-conjugated Monoclonal Antibody (Catalog # IC36081R) and Mouse Anti-Human CD38 PerCP-conjugated Monoclonal Antibody (Catalog # FAB2404C). Quadrant markers were set based on control antibody staining (Catalog # IC002R). To facilitate intracellular staining, cells were fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012). View our protocol for [Staining Intracellular Molecules](#).

**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**

Human BLIMP1 (B Lymphocyte-induced Maturation Protein 1), also known as PRDM1, is a 91 kDa zinc-finger transcriptional repressor that promotes B cell maturation into plasma cells. It is 789 amino acids (aa) in length, and contains an N-terminal S-E-T domain (aa 64-170) and four C-terminal C2H2-type zinc-finger motifs (aa 539-645). The SET domain interacts with chromatin modifiers, while the zinc fingers bind to DNA. There is one 80 kDa, 691 aa alternate splice form that utilizes an internal start site. This results in a substitution of three aa for the first 101 aa of the long form, and the loss of the SET domain. At least 10 mutations exist, resulting in proteins of 61-603 aa in length. Over aa 667-789, human BLIMP1 shares 89% aa sequence identity with mouse BLIMP1.

**PRODUCT SPECIFIC NOTICES**

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