

DESCRIPTION

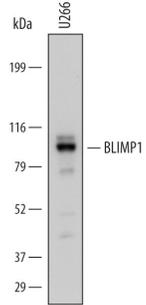
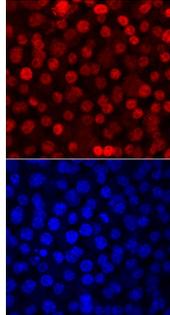
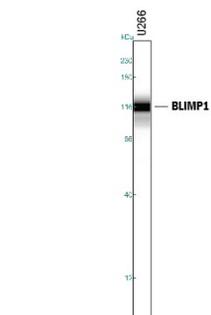
Species Reactivity	Human
Specificity	Detects human BLIMP1/PRDM1 in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 646702
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human BLIMP1/PRDM1 Lys667-Cys789 Accession # O75626
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below
Simple Western	10 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human BLIMP1/PRDM1 by Western Blot. Western blot shows lysates of U266 human myeloma cell line. PVDF Membrane was probed with 1 µg/mL of Mouse Anti-Human BLIMP1/PRDM1 Monoclonal Antibody (Catalog # MAB36081) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for BLIMP1/PRDM1 at approximately 91 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>BLIMP1/PRDM1 in U266 Human Cell Line. BLIMP1/PRDM1 was detected in immersion fixed U266 human myeloma cell line using Mouse Anti-Human BLIMP1/PRDM1 Monoclonal Antibody (Catalog # MAB36081) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>
<p>Simple Western</p>  <p>Detection of Human BLIMP1/PRDM1 by Simple Western™. Simple Western lane view shows lysates of U266 human myeloma cell line, loaded at 0.2 mg/mL. A specific band was detected for BLIMP1/PRDM1 at approximately 114 kDa (as indicated) using 10 µg/mL of Mouse Anti-Human BLIMP1/PRDM1 Monoclonal Antibody (Catalog # MAB36081). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.</p> 	

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	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
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 is 89% aa identical to mouse BLIMP1.