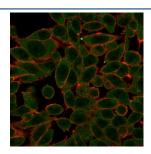


# BLIMP-1 Antibody / PRDM1 [clone PCRP-PRDM1-2B9] (V5177)

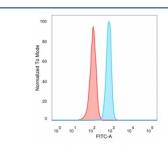
Catalog No.	Formulation	Size
V5177-100UG	0.2~mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5177-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5177SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

## **Bulk quote request**

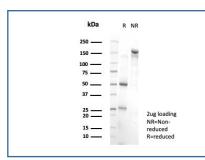
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a
Clone Name	PCRP-PRDM1-2B9
Purity	Protein A/G affinity
UniProt	O75626
Localization	Nucleus, Cytoplasm
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml
Limitations	This BLIMP-1 antibody is available for research use only.



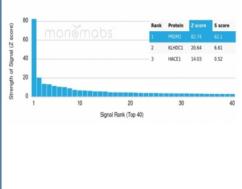
Immunofluorescent staining of PFA-fixed human HeLa cells with PRDM1 antibody (green, clone PCRP-PRDM1-2B9) and CF640R phalloidin (red).



Flow cytometry testing of PFA-fixed human HeLa cells with PRDM1 antibody (clone PCRP-PRDM1-2B9) followed by goat anti-mouse IgG-CF488 (blue); Red = unstained cells.



SDS-PAGE analysis of purified, BSA-free PRDM1 antibody (clone PCRP-PRDM1-2B9) as confirmation of integrity and purity.



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using PRDM1 antibody (clone PCRP-PRDM1-2B9). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a mAb to its intended target. A mAb is considered to specific to its intended target, if the mAb has an S-score of at least 2.5. For example, if a mAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that mAb to protein X is equal to 29.

## **Description**

The development and differentiation of plasma cells, which are terminally differentiated B-cells, are induced by Blimp-1 (B lymphocyte-induced maturation protein, also designated PRDI-BF1). Blimp-1 is a transcriptional repressor that localizes to the nucleus and is considered a master regulator of terminal B-cell development. Alone, Blimp-1 is sufficient to trigger terminal B-cell differentiation. Blimp-1 upregulates the expression of syndecan-1 and J chain, represses IFN-b gene transcription and associates with HDAC to recruit it to DNA, thereby repressing c-Myc. Blimp-1 is expressed during the late stages of B-cell differentiation in immunoglobulin-secreting plasma cells, as well as in long-lived, bone marrow plasma cells. The expression of Blimp-1 defines a checkpoint beyond which fully activated B cells proceed to the plasma cell stage, whereas immature and partially activated cells are eliminated.

# **Application Notes**

Optimal dilution of the BLIMP-1 antibody should be determined by the researcher.

### **Immunogen**

Recombinant full-length human protein was used as the immunogen for the BLIMP-1 antibody.

### **Storage**

Aliquot the BLIMP-1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.