10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PRDM1 (BLIMP1) Antibody Blocking peptide
Synthetic peptide
Catalog # BP1201a

Specification

PRDM1 (BLIMP1) Antibody Blocking peptide - Product Information

Primary Accession	O75626
Other Accession	NP_001189

PRDM1 (BLIMP1) Antibody Blocking peptide - Additional Information

Gene ID 639

Other Names
PR domain zinc finger protein 1, 211-, BLIMP-1, Beta-interferon gene positive regulatory domain I-binding factor, PR domain-containing protein 1, Positive regulatory domain I-binding factor 1, PRDI-BF1, PRDI-binding factor 1, PRDM1, BLIMP1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AM1201a was selected from the region of human SUMO3 Monoclonal. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PRDM1 (BLIMP1) Antibody Blocking peptide - Protein Information

Name PRDM1

Synonyms BLIMP1

Function
Transcription factor that mediates a transcriptional program in various innate and adaptive immune tissue-resident lymphocyte T cell types such as tissue-resident memory T (Trm), natural killer (trNK) and natural killer T (NKT) cells and negatively regulates gene expression of proteins that promote the egress of tissue-resident T-cell populations from non-lymphoid organs. Plays a role in the development, retention and long-term establishment of adaptive and innate tissue-resident lymphocyte T cell types in non-lymphoid organs, such as the skin and gut, but also in other nonbarrier tissues like liver and kidney, and therefore may provide immediate

immunological protection against reactivating infections or viral reinfection (By similarity). Binds specifically to the PRDI element in the promoter of the beta- interferon gene (PubMed:1851123). Drives the maturation of B- lymphocytes into Ig secreting cells (PubMed:12626569). Associates with the transcriptional repressor ZNF683 to chromatin at gene promoter regions (By similarity). Binds to the promoter and acts as a transcriptional repressor of IRF8, thereby promotes transcription of osteoclast differentiation factors such as NFATC1 and EEIG1 (By similarity).

Cellular Location
Nucleus. Cytoplasm

PRDM1 (BLIMP1) Antibody Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

PRDM1 (BLIMP1) Antibody Blocking peptide - Images

PRDM1 (BLIMP1) Antibody Blocking peptide - Background

Covalent attachment of one protein to another is one of the more prominent posttranslational modifications in respects to size and ubiquity ? to which eukaryotic proteins are subject. Ubiquitin is the most familiar of the protein modifiers and its activation and transfer to target proteins has been studied for over two decades. Recently a new group of ubiquitin-like (Ubl) proteins have come to light. One of the most intriguing of them is SUMO (small ubiquitin-like modifier, ~12kDa) also known as Sentrin. SUMO family has been described in vertebrates: SUMO-1 and the closest homologs SUMO-2 and SUMO-3. SUMO have been shown to bind and regulate mammalian SP-RINGs (such as Mdm2, PIAS and PML), RanGAP1, RanBP2, p53, p73, HIPK2, TEL, c-Jun, Fas, Daxx, TNFRI, Topo-I, Topo-II, WRN, Sp100, IkB-alpha, Androgen receptor (AR), GLUT1/4, Drosophila Ttk69, Dorsal, CaMK, yeast Septins, and viral CMV-IE1/2, EBV-BZLF1, HPV/BPV-E1. These bindings implicate SUMO in the stabilization of the target proteins and/or their localization to subcellular complexes. SUMO research enters now an exciting phase with a promise to help understanding how cells orchestrate the complexities of rapidly regulating protein level and activity.

PRDM1 (BLIMP1) Antibody Blocking peptide - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).Lapenta, V., et al., Genomics 40(2):362-366 (1997).