

**Blimp-1 Antibody**  
Catalog # ASC10480**Specification****Blimp-1 Antibody - Product Information**

Application	WB, IF
Primary Accession	<a href="#">O75626</a>
Other Accession	<a href="#">NP_001189</a> , <a href="#">172072684</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	Blimp-1 antibody can be used for detection of Blimp-1 by Western blot at 0.5 - 1 µg/mL. Antibody can also be used for immunofluorescence starting at 20 µg/mL. For immunofluorescence start at 20 µg/mL.

**Blimp-1 Antibody - Additional Information**

Gene ID 639

**Other Names**

Blimp-1 Antibody: BLIMP1, PRDI-BF1, BLIMP1, PR domain zinc finger protein 1, BLIMP-1, PR domain containing 1, with ZNF domain

**Target/Specificity**

PRDM1;

**Reconstitution & Storage**

Blimp-1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

Blimp-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Blimp-1 Antibody - 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:<a href="http://www.uniprot.org/citations/1851123" target="\_blank">1851123</a>). Drives the maturation of B- lymphocytes into Ig secreting cells (PubMed:<a href="http://www.uniprot.org/citations/12626569" target="\_blank">12626569</a>). 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

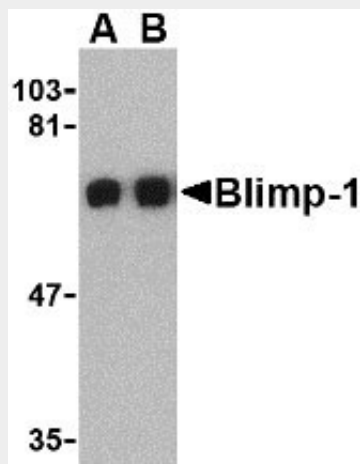
Nucleus. Cytoplasm

#### Blimp-1 Antibody - Protocols

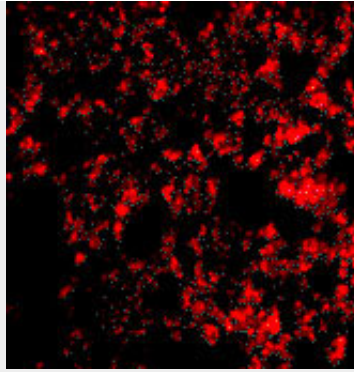
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

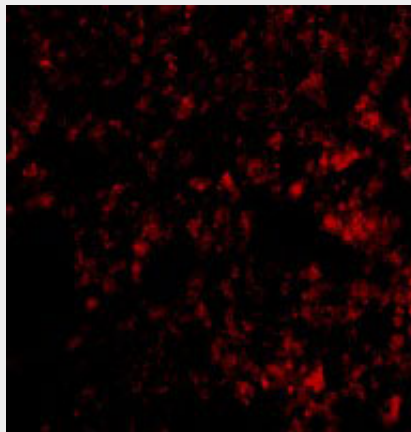
#### Blimp-1 Antibody - Images



Western blot analysis of Blimp-1 in A549 cell lysate with Blimp-1 antibody at (A) 0.5 and (B) 1 µg/mL.



Immunofluorescence of Blimp-1 in mouse lung tissue with Blimp-1 antibody at 20 µg/mL.



Immunofluorescence of Blimp-1 in Mouse Lung cells with Blimp-1 antibody at 20 µg/mL.

### **Blimp-1 Antibody - Background**

**Blimp-1 Antibody:** Blimp-1 was initially identified as a zinc finger-containing protein that drives the maturation of B lymphocytes into immunoglobulin-secreting cells. Together with X-box-binding protein 1 (XBP1), Blimp-1 is induced upon terminal differentiation of plasma cells. The transcriptional repressor activity of Blimp-1 has also been found to regulate T cell homeostasis and function, possibly by suppressing the expression of the cytokines IL-2 and interferon-gamma during T cell development. More recent experiments have suggested that Blimp-1 also plays a major role in the formation of primordial germ cells (PGC) in developing mammalian embryos. In these experiments, Blimp-1-deficient mutant mouse embryos form a cluster of PGC-like cells which fail to show the expected migration, proliferation, and repression of homeobox genes that normally accompany specification of primordial germ cells.

### **Blimp-1 Antibody - References**

Turner CAJ, Mack DH, and Davis MM. Blimp-1, a novel zinc finger-containing protein that can drive the maturation of B-lymphocytes into immunoglobulin-secreting cells. *Cell* 1994; 77:297-306.  
Angelin-Duclos C, Cattoretti G, Lin K-I, et al. Commitment of B lymphocytes to a plasma cell fate is associated with Blimp-1 expression. *J. Immunol.* 2000; 165:5462-71.  
Reimold AM, Iwakoshi NN, Manis J, et al. Plasma cell differentiation requires the transcription factor XBP-1. *Nature* 2001; 412:300-7.  
Martins GA, Cimmino L, Shapiro-Shelef M, et al. Transcriptional repressor Blimp-1 regulates T cell homeostasis and function. *Nature Immunol.* 2006; 7:457-65.