

PRDM14 (PFM11) Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP1214b

Specification

PRDM14 (PFM11) Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

Q9GZV8

PRDM14 (PFM11) Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 63978

Other Names

PR domain zinc finger protein 14, 211-, PR domain-containing protein 14, PRDM14

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1214b was selected from the PFM11 region of human PRDM14 (PFM11) . 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.

PRDM14 (PFM11) Antibody (C-term) Blocking Peptide - Protein Information

Name PRDM14

Function

Transcription factor that has both positive and negative roles on transcription. Required for the maintenance of embryonic stem cell identity and the reacquisition of pluripotency in somatic cells. May play an essential role in germ cell development at 2 levels: the reacquisition of potential pluripotency, including SOX2 up-regulation, and successful epigenetic reprogramming, characterized by EHMT1 repression. Its association with CBFA2T2 is required for the functions in pluripotency and germ cell formation (By similarity). Directly up- regulates the expression of pluripotency gene POU5F1 through its proximal enhancer. Binds to the DNA consensus sequence 5'-GGTCITCICTAA- 3'.

Cellular Location

Nucleus.



Tissue Location

Expressed in embryonic stem cells. Tends to be overexpressed in breast cancer (at protein level)

PRDM14 (PFM11) Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

PRDM14 (PFM11) Antibody (C-term) Blocking Peptide - Images

PRDM14 (PFM11) Antibody (C-term) Blocking Peptide - Background

Similar to acetylation and phosphorylation, histone methylation at the N terminal tail has emerged as an important role in regulating chromatin dynamics and gene activity. Histone methylation occurs on arginine and lysine residues and is catalyzed by two families of proteins, the protein arginine methyltransferase family and the SET domain containing methyltransferase family. Five members have been identified in the arginine methyltransferase family. About 27 are grouped into the SET domain family, and another 17 make up the PR domain family that is related to the SET domain family.PRDM14 is part of a family of PR domain genes that are involved in tumorigenesis. It may function as a transcription factor.

PRDM14 (PFM11) Antibody (C-term) Blocking Peptide - References

Xiao, B., et al., Curr. Opin. Struct. Biol. 13(6):699-705 (2003). Dias Neto, E., et al., Proc. Natl. Acad. Sci. U.S.A. 97(7):3491-3496 (2000). Jiang, G.L., et al., Histol. Histopathol. 15(1):109-117 (2000).