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PRDM15 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP1215b

Specification

PRDM15 Blocking Peptide (C-term) - Product Information

Primary Accession P57071

PRDM15 Blocking Peptide (C-term) - Additional Information

Gene ID 63977

Other Names
PR domain zinc finger protein 15, 211-, PR domain-containing protein 15, Zinc finger protein 298, PRDM15, C21orf83, ZNF298

Target/Specificity
The synthetic peptide sequence is selected from aa 934~951 of HUMAN PRDM15

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.

PRDM15 Blocking Peptide (C-term) - Protein Information

Name PRDM15 (HGNC:13999)

Function
Sequence-specific DNA-binding transcriptional regulator. Plays a role as a molecular node in a transcriptional network regulating embryonic development and cell fate decision. Stimulates the expression of upstream key transcriptional activators and repressors of the Wnt/beta-catenin and MAPK/ERK pathways, respectively, that are essential for naive pluripotency and self-renewal maintenance of embryonic stem cells (ESCs). Specifically promotes SPRY1 and RSPO1 transcription activation through recognition and direct binding of a specific DNA sequence in their promoter regions. Involved in early embryo development (By similarity). Also plays a role in induced pluripotent stem cells (iPSCs) reprogramming (PubMed:28740264).

Cellular Location
Nucleus.

Tissue Location

Detected in all tissues examined.

PRDM15 Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides

PRDM15 Blocking Peptide (C-term) - Images

PRDM15 Blocking Peptide (C-term) - 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. The retinoblastoma protein-interacting zinc finger geneRIZ1 is a tumor suppressor gene and a FOUNDING member of the PR domain family. RIZ1 inactivation is commonly found in many types of human cancers and occurs through loss of mRNA expression, frame shift mutation, chromosomal deletion, and missense mutation. RIZ1 is also a tumor susceptibility gene in mice. The loss of RIZ1 mRNA in human cancers was shown to associate with DNA methylation of its promoter CpG island. Methylation of the RIZ1 promoter strongly correlated with lost or decreased RIZ1 mRNA expression in breast, liver, colon, and lung cancer cell lines as well as in liver cancer tissues.

PRDM15 Blocking Peptide (C-term) - References

Gardiner, K., et al., Genomics 79(6):833-843 (2002).
Reymond, A., et al., Genomics 79(6):824-832 (2002).