

PRMT3 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP1005a**Specification**

PRMT3 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [O60678](#)**PRMT3 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 10196

Other Names

Protein arginine N-methyltransferase 3, 211-, Heterogeneous nuclear ribonucleoprotein methyltransferase-like protein 3, PRMT3, HRMT1L3

Target/Specificity

The synthetic peptide sequence is selected from aa 456~472 of human PRMT3.

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.

PRMT3 Antibody (C-term) Blocking Peptide - Protein InformationName PRMT3 ([HGNC:30163](#))**Function**

Protein-arginine N-methyltransferase that catalyzes both the monomethylation and asymmetric dimethylation of the guanidino nitrogens of arginine residues in target proteins, and therefore falls into the group of type I methyltransferases (PubMed:22795084, PubMed:23445220, PubMed:25728001, PubMed:31378783, PubMed:33495566, PubMed:39513743). Catalyzes the asymmetric arginine dimethylation at multiple sites in the Arg/Gly-rich region of small ribosomal subunit protein uS5/RPS2 (PubMed:22795084). Also appears to methylate other ribosomal proteins (By similarity). May regulate retinoic acid synthesis and signaling by inhibiting ALDH1A1 retinal dehydrogenase activity (PubMed:33495566). Contributes to methylation of histone H4 'Arg-3', a specific tag for epigenetic transcriptional activation (PubMed:25728001, PubMed:31378783, PubMed:39513743). Mediates asymmetric arginine dimethylation of histone H4 'Arg-3' (H4R3me2a) in the promoter region of miRNA miR-3648, to promote its transcription and osteogenesis (PubMed:31378783).

Cellular Location

Cytoplasm, cytosol. Nucleus Note=Localized to the nucleus by ZNF200.

PRMT3 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

PRMT3 Antibody (C-term) Blocking Peptide - Images

PRMT3 Antibody (C-term) Blocking Peptide - Background

Arginine methylation is an irreversible post translational modification which has only recently been linked to protein activity. At least three types of PRMT enzymes have been identified in mammalian cells. These enzymes have been shown to have essential regulatory functions by methylation of key proteins in several fundamental areas. These protein include nuclear proteins, IL enhancer binding factor, nuclear factors, cell cycle proteins, signal transduction proteins, apoptosis proteins, and viral proteins. The mammalian PRMT family currently consists of 7 members that share two large domains of homology. Outside of these domains, epitopes were identified and antibodies against all 7 PRMT members have been developed.

PRMT3 Antibody (C-term) Blocking Peptide - References

Wada K, et al. Biochim Biophys Acta. 2002. 1591:1.Cimato TR, et al. J Neurosci Res. 2002. 67:435.Frankel A, et al. J Biol Chem. 2002. 277:3537.Brahms H, et al. RNA. 2001. 7:1531.Pelletier M, et al. Mol Biochem Parasitol. 2001. 118:49.Belyanskaya LL, et al. J Biol Chem. 2001. 276:18681.Rho J, et al. J Biol Chem. 2001. 276:11393.Scorilas A, et al. Biochem Biophys Res Commun. 2000. 278:349.Frankel A, et al. J Biol Chem. 2000. 275:32974.Zhang X, et al. EMBO J. 19:3509.Tang J, et al. J Biol Chem. 1998. 273:16935.