

PHF2a/b Blocking Peptide (N-term)

Synthetic peptide

Catalog # BP1037a

Specification

PHF2a/b Blocking Peptide (N-term) - Product Information

Primary Accession

[O9WTU0](#)

Other Accession

[O75151](#), [Q6A023](#)**PHF2a/b Blocking Peptide (N-term) - Additional Information****Gene ID** 18676**Other Names**

Lysine-specific demethylase PHF2, 11411-, GRC5, PHD finger protein 2, Phf2, Kiaa0662

Target/Specificity

The synthetic peptide sequence is selected from aa 67-79 of MOUSE Phf2

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.

PHF2a/b Blocking Peptide (N-term) - Protein Information**Name** Phf2**Synonyms** Kiaa0662**Function**

Lysine demethylase that demethylates both histones and non-histone proteins (PubMed:22921934). Enzymatically inactive by itself, and becomes active following phosphorylation by PKA: forms a complex with ARID5B and mediates demethylation of methylated ARID5B. Demethylation of ARID5B leads to target the PHF2-ARID5B complex to target promoters, where PHF2 mediates demethylation of dimethylated 'Lys-9' of histone H3 (H3K9me2), followed by transcription activation of target genes. The PHF2-ARID5B complex acts as a coactivator of HNF4A in liver. PHF2 is recruited to trimethylated 'Lys-4' of histone H3 (H3K4me3) at rDNA promoters and promotes expression of rDNA (By similarity). Involved in the activation of toll-like receptor 4 (TLR4)- target inflammatory genes in macrophages by catalyzing the demethylation of trimethylated histone H4 lysine 20 (H4K20me3) at the gene promoters (PubMed:22921934).

Cellular Location

Nucleus, nucleolus {ECO:0000250|UniProtKB:O75151}. Chromosome, centromere, kinetochore {ECO:0000250|UniProtKB:O75151}

PHF2a/b Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)

PHF2a/b Blocking Peptide (N-term) - Images**PHF2a/b Blocking Peptide (N-term) - Background**

This gene encodes a protein which contains a zinc finger-like PHD (plant homeodomain) finger, distinct from other classes of zinc finger motifs, and a hydrophobic and highly conserved domain. The PHD finger shows the typical Cys4-His-Cys3 arrangement. PHD finger genes are thought to belong to a diverse group of transcriptional regulators possibly affecting eukaryotic gene expression by influencing chromatin structure. T

PHF2a/b Blocking Peptide (N-term) - References

Hasenpusch-Theil, K., et al., Mamm. Genome 10(3):294-298 (1999).