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PHF1 Blocking Peptide (N-term)
Synthetic peptide
Catalog # BP20638a

Specification

PHF1 Blocking Peptide (N-term) - Product Information

Primary Accession	O43189
Other Accession	Q9Z1B8

PHF1 Blocking Peptide (N-term) - Additional Information

Gene ID 5252

Other Names
PHD finger protein 1, Protein PHF1, hPHF1, Polycomb-like protein 1, hPCl1, PHF1, PCL1

Target/Specificity
The synthetic peptide sequence is selected from aa 164-177 of HUMAN PHF1

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.

PHF1 Blocking Peptide (N-term) - Protein Information

Name PHF1

Synonyms PCL1

Function
Polycomb group (PcG) that specifically binds histone H3 trimethylated at 'Lys-36' (H3K36me3) and recruits the PRC2 complex. Involved in DNA damage response and is recruited at double-strand breaks (DSBs). Acts by binding to H3K36me3, a mark for transcriptional activation, and recruiting the PRC2 complex: it is however unclear whether recruitment of the PRC2 complex to H3K36me3 leads to enhance or inhibit H3K27me3 methylation mediated by the PRC2 complex. According to some reports, PRC2 recruitment by PHF1 promotes H3K27me3 and subsequent gene silencing by inducing spreading of PRC2 and H3K27me3 into H3K36me3 loci (PubMed:18285464, PubMed:23273982). According to another report, PHF1 recruits the PRC2 complex at double-strand breaks (DSBs) and inhibits the activity of PRC2 (PubMed:23142980). Regulates p53/TP53 stability and prolonges its turnover: may

act by specifically binding to a methylated from of p53/TP53.

Cellular Location
Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Localizes specifically to the promoters of numerous target genes. Localizes to double-strand breaks (DSBs) sites following DNA damage. Co-localizes with NEK6 in the centrosome

Tissue Location
Highest levels in heart, skeletal muscle, and pancreas, lower levels in brain, placenta, lung, liver and kidney

PHF1 Blocking Peptide (N-term) - Protocols

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

- Blocking Peptides

PHF1 Blocking Peptide (N-term) - Images

PHF1 Blocking Peptide (N-term) - Background

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PHF1 Blocking Peptide (N-term) - References

Coulson M.,et al.Genomics 48:381-383(1998).
Wang J.H.,et al.Submitted (MAR-1998) to the EMBL/GenBank/DDBJ databases.
Mungall A.J.,et al.Nature 425:805-811(2003).
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Micci F.,et al.Cancer Res. 66:107-112(2006).