

PHF19 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP17707b

Specification

PHF19 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

Q5T6S3

PHF19 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 26147

Other Names

PHD finger protein 19, Polycomb-like protein 3, hPCL3, PHF19, PCL3

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.

PHF19 Antibody (C-term) Blocking Peptide - Protein Information

Name PHF19

Synonyms PCL3

Function

Polycomb group (PcG) protein that specifically binds histone H3 trimethylated at 'Lys-36' (H3K36me3) and recruits the PRC2 complex, thus enhancing PRC2 H3K27me3 methylation activity (PubMed:15563832, PubMed:18691976, PubMed:23160351, PubMed:23228662, PubMed:23228662, PubMed:23273982, PubMed:23104054, PubMed:23104054, PubMed:31959557). Probably involved in the transition from an active state to a repressed state in embryonic stem cells: acts by binding to H3K36me3, a mark for transcriptional activation, and recruiting H3K36me3 histone demethylases RIOX1 or KDM2B, leading to demethylation of H3K36 and recruitment of the PRC2 complex that mediates H3K27me3 methylation, followed by de novo silencing (PubMed:23160351). Recruits the PRC2 complex to CpG islands and contributes to



embryonic stem cell self- renewal. Also binds histone H3 dimethylated at 'Lys-36' (H3K36me2) (PubMed:23104054). Isoform 1 and isoform 2 inhibit transcription from an HSV-tk promoter (PubMed:15563832).

Cellular Location

Nucleus. Note=Localizes to chromatin as part of the PRC2 complex.

Tissue Location

Isoform 1 is expressed in thymus, heart, lung and kidney. Isoform 2 is predominantly expressed in placenta, skeletal muscle and kidney, whereas isoform 1 is predominantly expressed in liver and peripheral blood leukocytes. Overexpressed in many types of cancers, including colon, skin, lung, rectal, cervical, uterus, liver cancers, in cell lines derived from different stages of melanoma and in glioma cell lines.

PHF19 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

PHF19 Antibody (C-term) Blocking Peptide - Images

PHF19 Antibody (C-term) Blocking Peptide - Background

PHF19 acts as a transcritpional repressor. Isoform 1 and isoform 2 inhibit transcription from an HSV-tk promoter.

PHF19 Antibody (C-term) Blocking Peptide - References

Gregersen, P.K., et al. Nat. Genet. 41(7):820-823(2009)Lamesch, P., et al. Genomics 89(3):307-315(2007)Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005)Wang, S., et al. Gene 343(1):69-78(2004)