

### PHF19 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17707b

### **Specification**

## PHF19 Antibody (C-term) - Product Information

**Application** WB,E **Primary Accession** O5T6S3 NP 056466.1 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 65591 Antigen Region 493-520

### PHF19 Antibody (C-term) - Additional Information

**Gene ID 26147** 

### **Other Names**

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

### Target/Specificity

This PHF19 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 493-520 amino acids from the C-terminal region of human PHF19.

## **Dilution**

WB~~1:1000

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

PHF19 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## PHF19 Antibody (C-term) - 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:23273982, PubMed:29499137, 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**

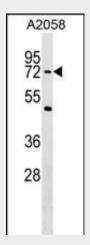
Isoform 1 is expressed in thymus, heart, lung and kidney. Isoform 2 is predominantly expressed in placenta, skeletal muscle and kidney, whereas isoform 1 is predominantly expressed in liver and peripheral blood leukocytes. Overexpressed in many types of cancers, including colon, skin, lung, rectal, cervical,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

### PHF19 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## PHF19 Antibody (C-term) - Images



PHF19 Antibody (C-term) (Cat. #AP17707b) western blot analysis in A2058 cell line lysates (35ug/lane). This demonstrates the PHF19 antibody detected the PHF19 protein (arrow).



# PHF19 Antibody (C-term) - Background

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

## PHF19 Antibody (C-term) - 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)