10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PHF19 (isoform b) Antibody (internal region, near C-Term)

Peptide-affinity purified goat antibody
Catalog # AF4049a

Specification

PHF19 (isoform b) Antibody (internal region, near C-Term) - Product Information

Application	**E**
Primary Accession	Q5T6S3
Other Accession	NP_001009936.1, 26147
Predicted	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**65591**

PHF19 (isoform b) Antibody (internal region, near C-Term) - Additional Information

Gene ID 26147

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

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PHF19 (isoform b) Antibody (internal region, near C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

PHF19 (isoform b) Antibody (internal region, near 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 (isoform b) Antibody (internal region, near 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 (isoform b) Antibody (internal region, near C-Term) - Images

PHF19 (isoform b) Antibody (internal region, near C-Term) - Background

This antibody is expected to recognize both reported isoforms (NP_056466.1; NP_001009936.1).

PHF19 (isoform b) Antibody (internal region, near C-Term) - References

Polycomb PHF19 binds H3K36me3 and recruits PRC2 and demethylase NO66 to embryonic stem cell genes during differentiation. Brien GL, Gambero G, O'Connell DJ, Jerman E, Turner SA, Egan CM, Dunne EJ, Jurgens MC, Wynne K, Piao L, Lohan AJ, Ferguson N, Shi X, Sinha KM, Loftus BJ, Cagney G, Bracken AP. Nature structural & molecular biology 2012 Dec 19 (12): 1273-81. PMID: 23160351