

For Research Use Only

# PHF1 Polyclonal antibody

Catalog Number: 15663-1-AP

4 Publications



## Basic Information

|  |  |   |
|--|--|---|
| <b>Catalog Number:</b><br>15663-1-AP                           | <b>GenBank Accession Number:</b><br>BC008834 | <b>Purification Method:</b><br>Antigen affinity purification          |
| <b>Size:</b><br>150ul , Concentration: 1000 ug/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>5252                | <b>Recommended Dilutions:</b><br>WB 1:1000-1:6000<br>IHC 1:250-1:1000 |
| <b>Source:</b><br>Rabbit                                       | <b>UNIPROT ID:</b><br>O43189                 |   |
| <b>Isotype:</b><br>IgG   | <b>Full Name:</b><br>PHD finger protein 1    |   |
| <b>Immunogen Catalog Number:</b><br>AG8094                     | <b>Calculated MW:</b><br>567 aa, 62 kDa      |   |
|  | <b>Observed MW:</b><br>62-70 kDa             |   |

## Applications

|  |  |
|--|--|
| <b>Tested Applications:</b><br>WB, IHC, ELISA  | <b>Positive Controls:</b>  |
| <b>Cited Applications:</b><br>WB   | <b>WB :</b> C2C12 cells, mouse heart tissue, PC-12 cells, mouse liver tissue |
| <b>Species Specificity:</b><br>human, mouse, rat   | <b>IHC :</b> mouse stomach tissue, mouse heart tissue                        |
| <b>Cited Species:</b><br>human, mouse  |  |
| <b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b> |  |

## Background Information

PHF1, also named as PHD finger protein 1, is a 567 amino acid protein, which contains 2 PHD-type zinc fingers and 1 Tudor domain and belongs to the Polycomblike family. Polycomb group (PcG) that specifically binds histone H3 trimethylated at 'Lys-36' (H3K36me3) and recruits the PRC2 complex. PHF1 involve in DNA damage response and is recruited at double-strand breaks (DSBs). PHF1 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. According to another report, PHF1 recruits the PRC2 complex at double-strand breaks (DSBs) and inhibits the activity of PRC2. PHF1 regulates p53/TP53 stability and prolongs its turnover. PHF1 may act by specifically binding to a methylated form of p53/TP53.

## Notable Publications

| Author       | Pubmed ID | Journal    | Application |
|--------------|-----------|------------|-------------|
| Ka-Wing Fong | 36476474  | Mol Cell   | WB          |
| Eric Conway  | 29628311  | Mol Cell   | WB          |
| Feng Qi      | 39449040  | Mol Cancer | WB          |

## Storage

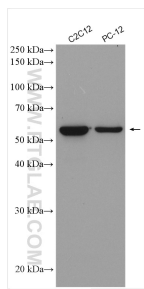
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

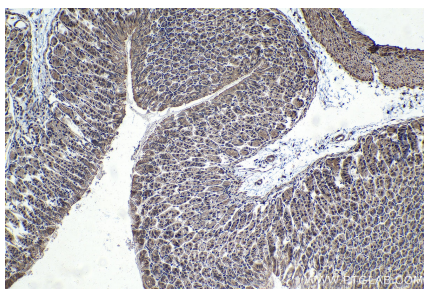
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

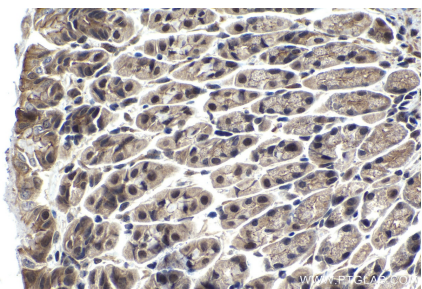
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 15663-1-AP (PHF1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse stomach tissue slide using 15663-1-AP (PHF1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse stomach tissue slide using 15663-1-AP (PHF1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).