

**PHF12 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP11130b**

### Specification

#### PHF12 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q96QT6</a>
Other Accession	<a href="#">Q5SPL2</a> , <a href="#">NP_001028733.1</a> , <a href="#">NP_065940.1</a>
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	109698
Antigen Region	831-859

#### PHF12 Antibody (C-term) - Additional Information

##### Gene ID 57649

##### Other Names

PHD finger protein 12, PHD factor 1, Pf1, PHF12 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=20816" target="\_blank">HGNC:20816</a>)

##### Target/Specificity

This PHF12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 831-859 amino acids from the C-terminal region of human PHF12.

##### Dilution

WB~~1:1000  
IHC-P~~1:50~100  
E~~Use at an assay dependent concentration.

##### 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

PHF12 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### PHF12 Antibody (C-term) - Protein Information

**Name** PHF12 ([HGNC:20816](#))

**Function** Transcriptional repressor acting as key scaffolding subunit of SIN3 complexes which contributes to complex assembly by contacting each core subunit domain, stabilizes the complex and constitutes the substrate receptor by recruiting the H3 histone tail (PubMed:[37137925](#)). SIN3 complexes are composed of a SIN3 scaffold subunit, one catalytic core (HDAC1 or HDAC2) and 2 chromatin targeting modules (PubMed:[11390640](#), PubMed:[37137925](#)). SIN3B complex represses transcription and counteracts the histone acetyltransferase activity of EP300 through the recognition H3K27ac marks by PHF12 and the activity of the histone deacetylase HDAC2 (PubMed:[37137925](#)). SIN3B complex is recruited downstream of the constitutively active genes transcriptional start sites through interaction with histones and mitigates histone acetylation and RNA polymerase II progression within transcribed regions contributing to the regulation of transcription (PubMed:[21041482](#)). May also repress transcription in a SIN3A- independent manner through recruitment of functional TLE5 complexes to DNA (PubMed:[11390640](#)). May also play a role in ribosomal biogenesis (By similarity).

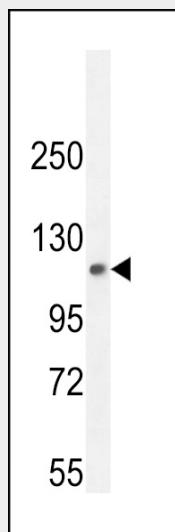
**Cellular Location**

Nucleus.

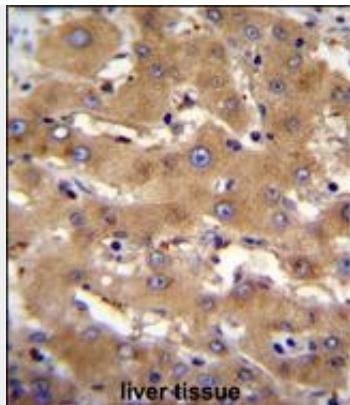
**PHF12 Antibody (C-term) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PHF12 Antibody (C-term) - Images**

PHF12 Antibody (C-term) (Cat. #AP11130b) western blot analysis in mouse lung tissue lysates (35ug/lane). This demonstrates the PHF12 antibody detected the PHF12 protein (arrow).



PHF12 Antibody (C-term) (Cat. #AP11130b) immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PHF12 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

### **PHF12 Antibody (C-term) - Background**

Inhibins and activins inhibit and activate, respectively, the secretion of follitropin by the pituitary gland. Inhibins/activins are involved in regulating a number of diverse functions such as hypothalamic and pituitary hormone secretion, gonadal hormone secretion, germ cell development and maturation, erythroid differentiation, insulin secretion, nerve cell survival, embryonic axial development or bone growth, depending on their subunit composition. Inhibins appear to oppose the functions of activins.

### **PHF12 Antibody (C-term) - References**

- Nousiainen, M., et al. Proc. Natl. Acad. Sci. U.S.A. 103(14):5391-5396(2006)
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- Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)
- Yochum, G.S., et al. Mol. Cell. Biol. 22(22):7868-7876(2002)
- Yochum, G.S., et al. Mol. Cell. Biol. 21(13):4110-4118(2001)