

# PHF21A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16505c

# **Product Information**

Application	WB, E
Primary Accession	<u>Q96BD5</u>
Other Accession	<u>Q6ZPK0, NP_057705.3</u>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35968
Calculated MW	74854
Antigen Region	436-464

## **Additional Information**

Gene ID	51317
Other Names	PHD finger protein 21A, BHC80a, BRAF35-HDAC complex protein BHC80, PHF21A, BHC80, KIAA1696
Target/Specificity	This PHF21A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 436-464 amino acids from the Central region of human PHF21A.
Dilution	WB~~1:1000 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	PHF21A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	PHF21A
Synonyms	BHC80, KIAA1696

Function	Component of the BHC complex, a corepressor complex that represses transcription of neuron-specific genes in non-neuronal cells. The BHC complex is recruited at RE1/NRSE sites by REST and acts by deacetylating and demethylating specific sites on histones, thereby acting as a chromatin modifier. In the BHC complex, it may act as a scaffold. Inhibits KDM1A-mediated demethylation of 'Lys-4' of histone H3 in vitro, suggesting a role in demethylation regulation.
Cellular Location	Nucleus.
Tissue Location	Highly expressed in brain (PubMed:31649809). Expressed at lower level in other tissues, including heart, kidney, liver, lung and skeletal muscle (PubMed:31649809). Abundantly expressed in fetal brain (PubMed:31649809).

# Background

The PHF21A gene encodes BHC80, a component of a BRAF35 (MIM 605535)/histone deacetylase (HDAC; see MIM 601241) complex (BHC) that mediates repression of neuron-specific genes through the cis-regulatory element known as repressor element-1 (RE1) or neural restrictive silencer (NRS) (Hakimi et al., 2002 [PubMed 12032298]).

## References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Klajn, A., et al. J. Neurosci. 29(19):6296-6307(2009) Hailesellasse Sene, K., et al. BMC Genomics 8, 85 (2007) : Shi, Y.J., et al. Mol. Cell 19(6):857-864(2005) Iwase, S., et al. Biochem. Biophys. Res. Commun. 322(2):601-608(2004)

#### Images



PHF21A Antibody (Center) (Cat. #AP16505c) western blot analysis in A375 cell line lysates (35ug/lane).This demonstrates the PHF21A antibody detected the PHF21A protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.