

PHF14 Antibody
Catalog # ASC11702**Specification**

PHF14 Antibody - Product Information

Application	WB, IF
Primary Accession	O94880
Other Accession	NP_055475 , 55769548
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 98 kDa

Application Notes	Observed: 100kDa KDa PHF14 antibody can be used for detection of PHF14 by Western blot at 1 - 2 µg/ml.
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PHF14 Antibody - Additional Information

Gene ID **9678**

Target/Specificity

PHF14; PHF14 antibody is human, mouse and rat reactive. Multiple isoforms of PHF14 are known to exist.

Reconstitution & Storage

PHF14 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

PHF14 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PHF14 Antibody - Protein Information

Name PHF14

Synonyms KIAA0783

Function

Histone-binding protein (PubMed:23688586). Binds preferentially to unmodified histone H3 but can also bind to a lesser extent to histone H3 trimethylated at 'Lys-9' (H3K9me3) as well as to histone H3 monomethylated at 'Lys-27' (H3K27ac) and trimethylated at 'Lys-27' (H3K27me3) (By similarity). Represses PDGFRA expression, thus playing a role in regulation of mesenchymal cell proliferation (By similarity). Suppresses the expression of CDKN1A/p21 by reducing the level of trimethylation of histone H3 'Lys-4', leading to enhanced proliferation of germinal center B cells (By similarity).

Cellular Location

[Isoform 1]: Nucleus. Chromosome. Note=Mainly localized in the nucleus of interphase cells. In

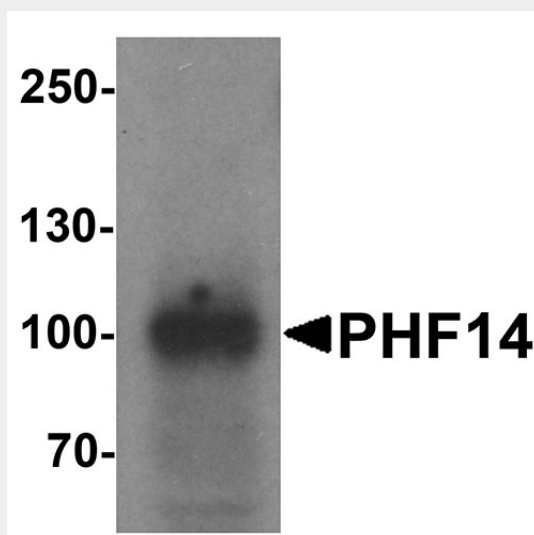
mitotic cells, colocalizes with condensed chromatin during metaphase and anaphase.

PHF14 Antibody - Protocols

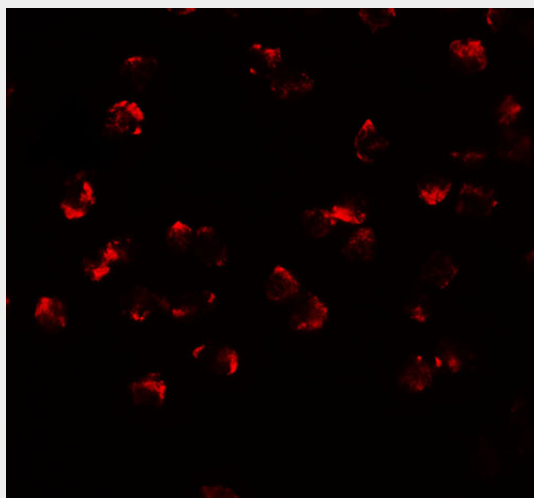
Provided below are standard protocols that you may find useful for product applications.

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

PHF14 Antibody - Images



Western blot analysis of PHF14 in 293 cell lysate with PHF14 antibody at 1 μ g/ml.



Immunofluorescence of PHF14 in 293 cells with PHF14 antibody at 5 μ g/mL.

PHF14 Antibody - Background

PHF14, a novel plant homology domain (PHD) transcription factor, controls the proliferation of mesenchymal cells by regulating PDGFR alpha expression in embryonic development (1). PHD finger transcription factors are concerned with transcriptional regulation by interacting with modified histones (2), and dysregulation of several genes encoding PHD finger transcription factors, such as ING1 and RBP2, has been found in human cancer diseases suggesting these factors have an important role for cancer cell proliferation. PHF14 is a potential target for new treatments of lung fibrosis (1, 3).

PHF14 Antibody - References

Kitagawa M, Takebe A, Ono Y, et al. Phf14, a novel regulator of mesenchyme growth via platelet-derived growth factor (PDGF) receptor- α . J. Biol. Chem. 2012; 287:27983-96.
Musco G and Peterson P. PHD finger of autoimmune regulator: an epigenetic link between the histone modifications and tissue-specific antigen expression in thymus. Epigenetics 2008; 3:310-4.
Musselman CA and Kutateladze TG. PHD fingers: epigenetic effectors and potential drug targets. Mol. Interv. 2009; 9:314-23.