

PHF1 (P-12): sc-107933

BACKGROUND

PHF1 (PHD protein finger 1), also known as polycomb-like protein 1 or hPC1, is a 567 amino acid member of the PHD finger protein family. Members of the PHD finger protein family function as transcriptional regulators that affect gene expression by modulating chromatin structure. With a subcellular localization to the nucleus, PHF1 is widely expressed in tissues, with high expression in pancreas, heart and skeletal muscle and low expression in liver, lung, kidney, brain and placenta. PHF1 contains two PHD-type zinc finger domains, which may contribute to the transcriptional activity of PHF1. PHF1 is thought to interact with ENX-1, a component of PRC2 (polycomb repressive complex 2), increasing the gene silencing activity of PRC2. PHF1 exists as two isoforms produced by alternative splicing.

REFERENCES

1. Coulson, M., Robert, S., Eyre, H.J. and Saint, R. 1998. The identification and localization of a human gene with sequence similarity to Polycomb-like of *Drosophila melanogaster*. *Genomics* 48: 381-383.
2. O'Connell, S., Wang, L., Robert, S., Jones, C.A., Saint, R. and Jones, R.S. 2001. Polycomb-like PHD fingers mediate conserved interaction with enhancer of zeste protein. *J. Biol. Chem.* 276: 43065-43073.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602881. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Villa, R., Pasini, D., Gutierrez, A., Morey, L., Occhionorelli, M., Viré, E., Nomdedeu, J.F., Jenuwein, T., Pelicci, P.G., Minucci, S., Fuks, F., Helin, K. and Di Croce, L. 2007. Role of the polycomb repressive complex 2 in acute promyelocytic leukemia. *Cancer Cell* 11: 513-525.

CHROMOSOMAL LOCATION

Genetic locus: PHF1 (human) mapping to 6p21.32; Phf1 (mouse) mapping to 17 A3.3.

SOURCE

PHF1 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PHF1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107933 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

PHF1 (P-12) is recommended for detection of PHF1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other PHF family members.

Suitable for use as control antibody for PHF1 siRNA (h): sc-95264, PHF1 siRNA (m): sc-39797, PHF1 shRNA Plasmid (h): sc-95264-SH, PHF1 shRNA Plasmid (m): sc-39797-SH, PHF1 shRNA (h) Lentiviral Particles: sc-95264-V and PHF1 shRNA (m) Lentiviral Particles: sc-39797-V.

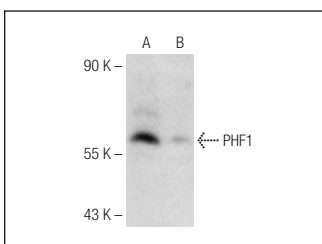
Molecular Weight of PHF1: 62 kDa.

Positive Controls: A-431 nuclear extract: sc-2122 or HeLa nuclear extract: sc-2120.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PHF1 (P-12): sc-107933. Western blot analysis of PHF1 expression in A-431 (A) and HeLa (B) nuclear extracts.

RESEARCH USE

For research use only, not for use in diagnostic procedures.


 MONOS
Satisfaction
Guaranteed

Try **PHF1 (H-1): sc-515013** or **PHF1 (864C6a): sc-130646**, our highly recommended monoclonal alternatives to PHF1 (P-12).