



## PHF24 (C-18): sc-247286

### BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. PHF24 (PHD finger protein 24), also known as KIAA1045, is a 400 amino acid protein containing one PHD-type zinc finger motif, suggesting involvement in transcriptional regulation events. Conserved in chimpanzee, Rhesus monkey, canine, bovine, mouse, rat, chicken, zebrafish and frog, the gene encoding PHF24 is located on human chromosome 9. Chromosome 9 houses over 900 genes and comprises nearly 4% of the human genome. Considered to play a role in gender determination, deletion of the distal portion of chromosome 9p can lead to development of male to female sex reversal, the phenotype of a female with a male XY genotype.

### REFERENCES

- Mohrmann, G., Hengstler, J.G., Hofmann, T.G., Ende, S.U., Lee, B., Stelzer, C., Zabel, B., Brieger, J., Hasenclever, D., Tanner, B., Sagemueller, J., Sehouli, J., Will, H. and Winterpacht, A. 2005. SPOC1, a novel PHD-finger protein: association with residual disease and survival in ovarian cancer. *Int. J. Cancer* 116: 547-554.
- Zhuang, H., Kosboth, M., Lee, P., Rice, A., Driscoll, D.J., Zori, R., Narain, S., Lyons, R., Satoh, M., Sobel, E. and Reeves, W.H. 2006. Lupus-like disease and high interferon levels corresponding to trisomy of the type I interferon cluster on chromosome 9p. *Arthritis Rheum.* 54: 1573-1579.
- Burmeister, T., Schwartz, S., Taubald, A., Jost, E., Lipp, T., Schneller, F., Diedrich, H., Thomssen, H., Mey, U.J., Eucker, J., Rieder, H., Gökbuget, N., Hoelzer, D. and Thiel, E. 2007. Atypical BCR-ABL mRNA transcripts in adult acute lymphoblastic leukemia. *Haematologica* 92: 1699-1702.
- Cottin, V., Dupuis-Girod, S., Lesca, G. and Cordier, J.F. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (rendu-osler disease). *Respiration* 74: 361-378.
- Zeit, M.J., Marella, N.V., Malyavantham, K.S., Goetze, S., Bode, J., Raska, I. and Berezney, R. 2009. Organization of the amplified type I interferon gene cluster and associated chromosome regions in the interphase nucleus of human osteosarcoma cells. *Chromosome Res.* 17: 305-319.
- Gold-von Simson, G., Goldberg, J.D., Rolnitzky, L.M., Mull, J., Leyne, M., Voustantiyouk, A., Slangenaupt, S.A. and Axelrod, F.B. 2009. Kinetin in familial dysautonomia carriers: implications for a new therapeutic strategy targeting mRNA splicing. *Pediatr. Res.* 65: 341-346.
- Axelrod, F.B., Hilz, M.J., Berlin, D., Yau, P.L., Javier, D., Sweat, V., Bruehl, H. and Convit, A. 2010. Neuroimaging supports central pathology in familial dysautonomia. *J. Neurol.* 257: 198-206.

### CHROMOSOMAL LOCATION

Genetic locus: PHF24 (human) mapping to 9p13.3; Phf24 (mouse) mapping to 4 A5.

### SOURCE

PHF24 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PHF24 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-247286 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

PHF24 (C-18) is recommended for detection of PHF24 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

PHF24 (C-18) is also recommended for detection of PHF24 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PHF24 siRNA (h): sc-92664, PHF24 siRNA (m): sc-149776, PHF24 shRNA Plasmid (h): sc-92664-SH, PHF24 shRNA Plasmid (m): sc-149776-SH, PHF24 shRNA (h) Lentiviral Particles: sc-92664-V and PHF24 shRNA (m) Lentiviral Particles: sc-149776-V.

Molecular Weight of PHF24: 45 kDa.

### 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) 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.

### STORAGE

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

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.