

# PHF20 (I-17): sc-85820

## 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. PHF20 (PHD finger protein 20), also known as NZF, TZP, GLEA2 or HCA58, is a 1,012 amino acid protein that localizes to the nucleus and contains one PHD-type zinc-finger, one C<sub>2</sub>H<sub>2</sub>-type zinc-finger and one A-T hook DNA-binding domain. Expressed in a variety of tissues, including liver, heart, lung, pancreas, spleen, testis and placenta, PHF20 is thought to function as a transcription factor, possibly playing a role in carcinogenesis. PHF20 exists as two alternatively spliced isoforms which are encoded by a gene that maps to human chromosome 20.

## REFERENCES

1. Fischer, U., Struss, A.K., Hemmer, D., Pallasch, C.P., Steudel, W.I. and Meese, E. 2001. Glioma-expressed antigen 2 (GLEA2): a novel protein that can elicit immune responses in glioblastoma patients and some controls. *Clin. Exp. Immunol.* 126: 206-213.
2. Wang, Y., Han, K.J., Pang, X.W., Vaughan, H.A., Qu, W., Dong, X.Y., Peng, J.R., Zhao, H.T., Rui, J.A., Leng, X.S., Cebon, J., Burgess, A.W. and Chen, W.F. 2002. Large scale identification of human hepatocellular carcinoma-associated antigens by autoantibodies. *J. Immunol.* 169: 1102-1109.
3. Pallasch, C.P., Struss, A.K., Munnia, A., König, J., Steudel, W.I., Fischer, U. and Meese, E. 2005. Autoantibodies against GLEA2 and PHF3 in glioblastoma: tumor-associated autoantibodies correlated with prolonged survival. *Int. J. Cancer* 117: 456-459.
4. Taniwaki, M., Daigo, Y., Ishikawa, N., Takano, A., Tsunoda, T., Yasui, W., Inai, K., Kohno, N. and Nakamura, Y. 2006. Gene expression profiles of small-cell lung cancers: molecular signatures of lung cancer. *Int. J. Oncol.* 29: 567-575.
5. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610335. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Heisel, S.M., Ketter, R., Keller, A., Klein, V., Pallasch, C.P., Lenhof, H.P. and Meese, E. 2008. Increased seroreactivity to glioma-expressed antigen 2 in brain tumor patients under radiation. *PLoS ONE* 3: e2164.

## CHROMOSOMAL LOCATION

Genetic locus: PHF20 (human) mapping to 20q11.22; Phf20 (mouse) mapping to 2 H1.

## SOURCE

PHF20 (I-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PHF20 of human origin.

## 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.

## 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-85820 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-85820 X, 100 µg/0.1 ml.

## APPLICATIONS

PHF20 (I-17) is recommended for detection of PHF20 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); non cross-reactive with other PHF family members.

PHF20 (I-17) is also recommended for detection of PHF20 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PHF20 siRNA (h): sc-76117, PHF20 siRNA (m): sc-152213, PHF20 shRNA Plasmid (h): sc-76117-SH, PHF20 shRNA Plasmid (m): sc-152213-SH, PHF20 shRNA (h) Lentiviral Particles: sc-76117-V and PHF20 shRNA (m) Lentiviral Particles: sc-152213-V.

PHF20 (I-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of PHF20: 115 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

## 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.

## PROTOCOLS

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