

# PWP2 (H-7): sc-398474

## BACKGROUND

PWP2 (periodic tryptophan protein 2), also known as EHOC-17, is a 919 amino acid protein that is the human homolog of the *Saccharomyces cerevisiae* periodic Trp 2 protein. Belonging to the WD repeat PWP2 family of proteins, PWP2 contains 14 WD repeats and has over 40% identity to the yeast homolog. PWP2 is localized to the nucleus and is implicated to play a role in early G<sub>1</sub> phase of the cell cycle. Essential for cell viability, PWP2 is also thought to be a candidate for various genetic disorders, such as progressive myoclonus epilepsy (EPM1), autoimmune polyglandular disease (APECED) and holoprosencephaly-1 (HPE1). The PWP2 gene maps to chromosome 21q22.3.

## REFERENCES

1. Yamakawa, K., et al. 1996. A periodic tryptophan protein 2 gene homologue (PWP2H) in the candidate region of progressive myoclonus epilepsy on 21q22.3. *Cytogenet. Cell Genet.* 74: 140-145.
2. Lafrenière, R.G., et al. 1996. Isolation and genomic structure of a human homolog of the yeast periodic tryptophan protein 2 (PWP2) gene mapping to 21q22.3. *Genome Res.* 6: 1216-1226.
3. Lalioti, M.D., et al. 1996. Cloning the cDNA of human PWP2, which encodes a protein with WD repeats and maps to 21q22.3. *Genomics* 35: 321-327.
4. Shafaatian, R., et al. 1996. PWP2, a member of the WD-repeat family of proteins, is an essential *Saccharomyces cerevisiae* gene involved in cell separation. *Mol. Gen. Genet.* 252: 101-114.
5. Nagamine, K., et al. 1997. Genomic organization and complete nucleotide sequence of the human PWP2 gene on chromosome 21. *Genomics* 42: 528-531.
6. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 601475. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: PWP2 (human) mapping to 21q22.3.

## SOURCE

PWP2 (H-7) is a mouse monoclonal antibody raised against amino acids 107-234 mapping near the N-terminus of PWP2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PWP2 (H-7) is available conjugated to agarose (sc-398474 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398474 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398474 PE), fluorescein (sc-398474 FITC), Alexa Fluor® 488 (sc-398474 AF488), Alexa Fluor® 546 (sc-398474 AF546), Alexa Fluor® 594 (sc-398474 AF594) or Alexa Fluor® 647 (sc-398474 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398474 AF680) or Alexa Fluor® 790 (sc-398474 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

PWP2 (H-7) is recommended for detection of PWP2 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for PWP2 siRNA (h): sc-91396, PWP2 shRNA Plasmid (h): sc-91396-SH and PWP2 shRNA (h) Lentiviral Particles: sc-91396-V.

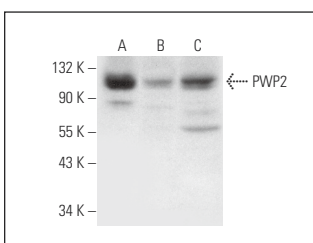
Molecular Weight of PWP2: 102 kDa.

Positive Controls: IMR-32 nuclear extract: sc-2148, HL-60 whole cell lysate: sc-2209 or Hep G2 cell lysate: sc-2227.

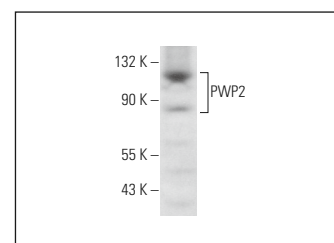
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



PWP2 (H-7): sc-398474. Western blot analysis of PWP2 expression in IMR-32 nuclear extract (A) and HL-60 (B) and Hep G2 (C) whole cell lysates.



PWP2 (H-7): sc-398474. Western blot analysis of PWP2 expression in A-431 whole cell lysate.

## 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) for detailed protocols and support products.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA