



**SZABO  
SCANDIC**

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](http://linkedin.com/company/szaboscandic)



# plakophilin 3 (h2): 293T Lysate: sc-173281

## BACKGROUND

Plakophilins 1, 2, 3 and 4 (PKP1-4) influence development and participate in linking cadherins to cytoskeletal intermediate filaments. Plakophilins 1-4 contain arm-repeat (armadillo) domains and localize to nuclei and cell desmosomes (cell-cell junctions found in suprabasal layers of stratifying epithelia that undergo mechanical stress). Plakophilin 1 mediates increases in desmosomal protein content, desmosome assembly and regulation of cell migration. Plakophilin 2 is important for desmosome assembly and is an essential morphogenic factor and architectural component of the heart. Plakophilin 3 plays a role in both desmosome-dependent adhesion and signaling pathways. Plakophilin 4 is a component of desmosomal adhesion plaques that regulates junctional plaque organization and cadherin function.

## REFERENCES

- Mertens, C., et al. 1999. Desmosomal plakophilin 2 as a differentiation marker in normal and malignant tissues. *Differentiation* 64: 277-290.
- Bonne, S., et al. 1999. Plakophilin 3, a novel armadillo-like protein present in nuclei and desmosomes of epithelial cells. *J. Cell Sci.* 112: 2265-2276.
- Hatzfeld, M., et al. 2000. The function of plakophilin 1 in desmosome assembly and Actin filament organization. *J. Cell Biol.* 149: 209-222.
- Bornslaeger, E.A., et al. 2001. Plakophilin 1 interferes with plakoglobin binding to desmoplakin, yet together with plakoglobin promotes clustering of desmosomal plaque complexes at cell-cell borders. *J. Cell Sci.* 114: 727-738.
- Mertens, C., et al. 2001. Nuclear particles containing RNA polymerase III complexes associated with the junctional plaque protein plakophilin 2. *Proc. Natl. Acad. Sci. USA* 98: 7795-7800.
- Chen, X., et al. 2002. Protein binding and functional characterization of plakophilin 2. Evidence for its diverse roles in desmosomes and  $\beta$ -catenin signaling. *J. Biol. Chem.* 277: 10512-10522.
- Bonne, S., et al. 2003. Defining desmosomal plakophilin 3 interactions. *J. Cell Biol.* 161: 403-416.
- South, A.P., et al. 2003. Lack of plakophilin 1 increases keratinocyte migration and reduces desmosome stability. *J. Cell Sci.* 116: 3303-3314.
- South, A.P. 2004. Plakophilin 1: an important stabilizer of desmosomes. *Clin. Exp. Dermatol.* 29: 161-167.

## CHROMOSOMAL LOCATION

Genetic locus: PKP3 (human) mapping to 11p15.5.

## PRODUCT

plakophilin 3 (h2): 293T Lysate represents a lysate of human plakophilin 3 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

plakophilin 3 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive plakophilin 3 antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

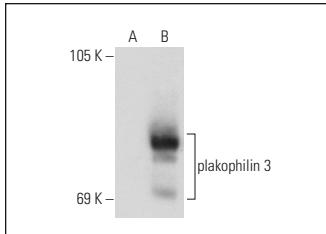
plakophilin 3 (E-10): sc-166655 is recommended as a positive control antibody for Western Blot analysis of enhanced human plakophilin 3 expression in plakophilin 3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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.

## DATA



plakophilin 3 (E-10): sc-166655. Western blot analysis of plakophilin 3 expression in non-transfected: sc-117752 (**A**) and human plakophilin 3 transfected: sc-173281 (**B**) 293T whole cell lysates.

## 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.