

plakophilin 3 (H-170): sc-68848

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 3 (PKP3) is a 797 amino acid protein that contains 8 arm-repeats and belongs to the β -catenin family. Encoded by a gene that maps to human chromosome 11p15.5, plakophilin 3 localizes to desmosomes of most simple and nearly all stratified epithelia, as well as cell lines derived therefrom, with the exception of hepatocytes and hepatocellular carcinoma cells. plakophilin 3 plays a role in both desmosome-dependent adhesion and signaling pathways, and may play a role in junctional plaques. Up-regulation of plakophilin 3 is a frequent and important feature of lung carcinogenesis, implicating plakophilin 3 as a candidate prognostic marker and therapeutic target for lung cancer.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PKP3 (human) mapping to 11p15.5; Pkp3 (mouse) mapping to 7 F5.

SOURCE

plakophilin 3 (H-170) is a rabbit polyclonal antibody raised against amino acids 51-220 mapping near the N-terminus of plakophilin 3 of human origin.

PRODUCT

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

APPLICATIONS

plakophilin 3 (H-170) is recommended for detection of plakophilin 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

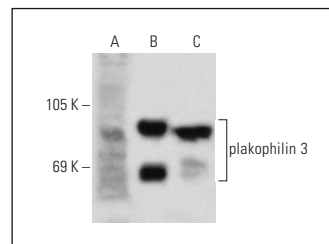
plakophilin 3 (H-170) is also recommended for detection of plakophilin 3 in additional species, including equine and porcine.

Suitable for use as control antibody for plakophilin 3 siRNA (h): sc-62826, plakophilin 3 siRNA (m): sc-62827, plakophilin 3 shRNA Plasmid (h): sc-62826-SH, plakophilin 3 shRNA Plasmid (m): sc-62827-SH, plakophilin 3 shRNA (h) Lentiviral Particles: sc-62826-V and plakophilin 3 shRNA (m) Lentiviral Particles: sc-62827-V.

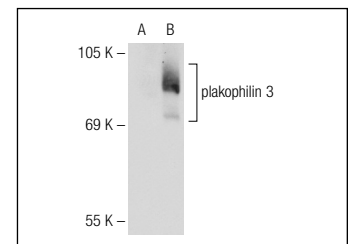
Molecular Weight of plakophilin 3: 87 kDa.

Positive Controls: plakophilin 3 (h): 293T Lysate: sc-173022, A549 cell lysate: sc-2413 or K-562 whole cell lysate: sc-2203.

DATA



plakophilin 3 (H-170): sc-68848. Western blot analysis of plakophilin 3 expression in non-transfected 293T: sc-117752 (A), human plakophilin 3 transfected 293T: sc-173022 (B) and K-562 (C) whole cell lysates.



plakophilin 3 (H-170): sc-68848. 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.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **plakophilin 3 (E-10): sc-166655** or **plakophilin 3 (23E3/4): sc-59976**, our highly recommended monoclonal alternatives to plakophilin 3 (H-170).