

plakophilin 2 (C-17): sc-18977

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 4 is a component of desmosomal adhesion plaques that regulates junctional plaque organization and cadherin function.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PKP2 (human) mapping to 12p11.21; Pkp2 (mouse) mapping to 16 A2.

SOURCE

plakophilin 2 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of plakophilin 2 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.

PRODUCT

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

Blocking peptide available for competition studies, sc-18977 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

plakophilin 2 (C-17) is recommended for detection of plakophilin 2 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).

plakophilin 2 (C-17) is also recommended for detection of plakophilin 2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for plakophilin 2 siRNA (h): sc-43182, plakophilin 2 siRNA (m): sc-43183, plakophilin 2 shRNA Plasmid (h): sc-43182-SH, plakophilin 2 shRNA Plasmid (m): sc-43183-SH, plakophilin 2 shRNA (h) Lentiviral Particles: sc-43182-V and plakophilin 2 shRNA (m) Lentiviral Particles: sc-43183-V.

Molecular Weight of plakophilin 2: 100 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

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.



Try **plakophilin 2 (C-1): sc-393711** or **plakophilin 2 (28): sc-136039**, our highly recommended monoclonal alternatives to plakophilin 2 (C-17).