

# PORCN (G-15): sc-139025

## BACKGROUND

PORCN (probable protein-cysteine N-palmitoyltransferase porcupine), also known as MG61, PORC, PPN, por, DHOF or FODH, is a 461 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum. Expressed as four isoforms that are found in a variety of tissues, including brain, testis, heart, skeletal muscle, spinal cord and lung, PORCN functions to modulate the processing of Wnt proteins. Specifically, PORCN interacts with Wnt-1, Wnt-3, Wnt-4 and Wnt-6 and acts as a protein-cysteine N-palmitoyltransferase that palmitoylates target Wnt proteins. Defects in the gene encoding PORCN are associated with focal dermal hypoplasia (FDH) (also known as Goltz syndrome), an X-linked disorder characterized by improper ectodermal and mesodermal tissue development.

## REFERENCES

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3. Tanaka, K., Kitagawa, Y. and Kadowaki, T. 2003. Misexpression of mouse porcupine isoforms modulates the differentiation of P19 embryonic carcinoma cells. *Cell Biol. Int.* 27: 549-557.
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## CHROMOSOMAL LOCATION

Genetic locus: PORCN (human) mapping to Xp11.23; Porcn (mouse) mapping to X A1.1.

## SOURCE

PORCN (G-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of PORCN 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 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139025 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PORCN (G-15) is recommended for detection of PORCN of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PORCN (G-15) is also recommended for detection of PORCN in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PORCN siRNA (h): sc-90930, PORCN siRNA (m): sc-152391, PORCN shRNA Plasmid (h): sc-90930-SH, PORCN shRNA Plasmid (m): sc-152391-SH, PORCN shRNA (h) Lentiviral Particles: sc-90930-V and PORCN shRNA (m) Lentiviral Particles: sc-152391-V.

Molecular Weight of PORCN: 52 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or PC-12 cell lysate: sc-2250.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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](http://www.scbt.com) or our catalog for detailed protocols and support products.