

Polycystin-1L2 (G-14): sc-168989

BACKGROUND

Polycystin-1L2, also known as PKD1L2 or PC1L2, is a 2,459 amino acid multi-pass membrane protein that belongs to the Polycystin family. Expressed in a variety of tissues, including placenta, brain, liver, lung, testis, skeletal muscle and fetal and adult heart, Polycystin-1L2 is thought to function as an ion-channel regulator and may also exhibit activity as a G protein-coupled receptor. Polycystin-1L2 contains a latrophilin/CL-1-like GPCR proteolytic site (GPS) domain, a polycystin-1, lipoxigenase, alpha-toxin (PLAT) domain and several transmembrane domains through which it conveys its regulatory function. Human Polycystin-1L2 shares 73% sequence similarity with its mouse counterpart, suggesting a conserved role between species. Defects in the gene encoding Polycystin-1L2 may be associated with Polycystic kidney disease, a progressive disorder characterized by the presence of cysts in the kidneys. Seven isoforms of Polycystin-1L2 exist due to alternative splicing events.

REFERENCES

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3. Li, A., Tian, X., Sung, S.W. and Somlo, S. 2003. Identification of two novel polycystic kidney disease-1-like genes in human and mouse genomes. *Genomics* 81: 596-608.
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CHROMOSOMAL LOCATION

Genetic locus: PKD1L2 (human) mapping to 16q23.2; Pkd1l2 (mouse) mapping to 8 E1.

SOURCE

Polycystin-1L2 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of Polycystin-1L2 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168989 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Polycystin-1L2 (G-14) is recommended for detection of Polycystin-1L2 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); non cross-reactive with Polycystin-1L1 or Polycystin-1L3.

Polycystin-1L2 (G-14) is also recommended for detection of Polycystin-1L2 in additional species, including equine and canine.

Suitable for use as control antibody for Polycystin-1L2 siRNA (h): sc-93058, Polycystin-1L2 siRNA (m): sc-152384, Polycystin-1L2 shRNA Plasmid (h): sc-93058-SH, Polycystin-1L2 shRNA Plasmid (m): sc-152384-SH, Polycystin-1L2 shRNA (h) Lentiviral Particles: sc-93058-V and Polycystin-1L2 shRNA (m) Lentiviral Particles: sc-152384-V.

Molecular Weight of Polycystin-1L2: 273 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.