

Polycystin-L2 (C-12): sc-165271

BACKGROUND

Polycystin-L2, also known as PKD2L2 (polycystic kidney disease 2-like 2), is a 624 amino acid multi-pass membrane protein belonging to the Polycystin family. Polycystin-L2 contains six to eight transmembrane domains, two cation channel motifs and one channel pore calcium sodium motif. Although 48% identical and 67% similar to both Polycystin-2 and Polycystin-L, Polycystin-L2 does not possess putative EF-hand or coiled-coil domains. Existing as five alternatively spliced isoforms, Polycystin-L2 is expressed in testis, brain and kidney, with isoform 2 solely expressed in transformed lymphoblasts and isoform 3 ubiquitously expressed. Polycystin-L2 may function as a subunit of a cation channel and may play a role in fertilization. Overexpression of Polycystin-L2 increases the intracellular calcium concentration of MDCK cells, suggesting that Polycystin-L2 may be involved in the mid-late stage of spermatogenesis by way of intracellular calcium concentrations.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PKD2L2 (human) mapping to 5q31.2; Pkd2l2 (mouse) mapping to 18 B1.

SOURCE

Polycystin-L2 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of Polycystin-L2 of human origin.

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-165271 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Polycystin-L2 (C-12) is recommended for detection of Polycystin-L2 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-L.

Polycystin-L2 (C-12) is also recommended for detection of Polycystin-L2 in additional species, including bovine and porcine.

Suitable for use as control antibody for Polycystin-L2 siRNA (h): sc-91892, Polycystin-L2 siRNA (m): sc-152387, Polycystin-L2 shRNA Plasmid (h): sc-91892-SH, Polycystin-L2 shRNA Plasmid (m): sc-152387-SH, Polycystin-L2 shRNA (h) Lentiviral Particles: sc-91892-V and Polycystin-L2 shRNA (m) Lentiviral Particles: sc-152387-V.

Molecular Weight of Polycystin-L2 isoforms 1/2/3/4/5: 74/70/73/72 kDa.

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.

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.