# SANTA CRUZ BIOTECHNOLOGY, INC.

# Polycystin-1L3 (S-19): sc-165270



The Power to Question

#### BACKGROUND

Polycystin-1L3, also known as PKD1L3 (polycystic kidney disease 1-like 3), is a 1,732 amino acid multi-pass membrane protein that contains one PLAT domain, one GPS domain and one C-type lectin domain. Expressed at high levels in placenta and present at lower levels in lung and heart, Polycystin-1L3 is thought to function as an ion-channel regulator that may interact with Polycystin-L and play a role in heteromeric taste channels. The gene encoding Polycystin-1L3 maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

## REFERENCES

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- Ishimaru, Y., et al. 2006. Transient receptor potential family members PKD1L3 and PKD2L1 form a candidate sour taste receptor. Proc. Natl. Acad. Sci. USA 103: 12569-12574.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 607895. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Chen, W.C., et al. 2008. Gene expression in early and progression phases of autosomal dominant polycystic kidney disease. BMC Res. Notes 1: 131.
- 6. Inada, H., et al. 2008. Off-response property of an acid-activated cation channel complex PKD1L3-PKD2L1. EMBO Rep. 9: 690-697.
- 7. Ishimaru, Y., et al. 2009. Transient receptor potential (TRP) channels and taste sensation. J. Dent. Res. 88: 212-218.
- 8. Garcia-Bailo, B., et al. 2009. Genetic variation in taste and its influence on food selection. OMICS 13: 69-80.

### CHROMOSOMAL LOCATION

Genetic locus: PKD1L3 (human) mapping to 16q22.2.

#### SOURCE

Polycystin-1L3 (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of Polycystin-1L3 of human origin.

#### **PRODUCTI**

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

Blocking peptide available for competition studies, sc-165270 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

Polycystin-1L3 (S-19) is recommended for detection of Polycystin-1L3 of 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-1L2.

Suitable for use as control antibody for Polycystin-1L3 siRNA (h): sc-93309, Polycystin-1L3 shRNA Plasmid (h): sc-93309-SH and Polycystin-1L3 shRNA (h) Lentiviral Particles: sc-93309-V.

Molecular Weight of Polycystin-1L3: 196 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) Immunofluo-rescence: use 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.