

# LLGL2 (T-13): sc-164884

## BACKGROUND

LLGL2 (lethal giant larvae homolog 2), also referred to as HGL or LGL2, is a cortical cytoskeleton protein that is a part of a larger complex of proteins. The complex, which consists of LGN, PKC  $\iota$  and PAR-6 $\beta$ , may play a role in ensuring the correct organization and orientation of bipolar spindles for normal cell division and for the initial phase of the establishment of epithelial cell polarity. In *Drosophila melanogaster*, LLGL2 is required in follicle cells for the differentiation of both stalk cells and posterior follicle cells. In humans, LLGL2 may be involved in cell proliferation control and tumorigenesis. Phosphorylation of LLGL2 is induced during cell polarization and may contribute to the segregation of LLGL2 from the PKC  $\iota$  and PAR-6 $\beta$  complex. Overexpression of LLGL2 is thought to inhibit tight junction formation in cells. LLGL2 is expressed in the cytoplasm and localizes to the perinuclear structure of the cell.

## REFERENCES

- Musch, A., Cohen, D., Yeaman, C., Nelson, W.J., Rodriguez-Boulan, E. and Brennwald, P.J. 2002. Mammalian homolog of *Drosophila* tumor suppressor lethal (2) giant larvae interacts with basolateral exocytic machinery in Madin-Darby canine kidney cells. *Mol. Biol. Cell* 13: 158-168.
- Chalmers, A.D., Pambos, M., Mason, J., Lang, S., Wylie, C. and Papalopulu, N. 2005. aPKC, Crumbs3 and Lgl2 control apicobasal polarity in early vertebrate development. *Development* 132: 977-986.
- Yasumi, M., Sakisaka, T., Hoshino, T., Kimura, T., Sakamoto, Y., Yamanaka, T., Ohno, S. and Takai, Y. 2005. Direct binding of Lgl2 to LGN during mitosis and its requirement for normal cell division. *J. Biol. Chem.* 280: 6761-6765.
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## CHROMOSOMAL LOCATION

Genetic locus: LLGL2 (human) mapping to 17q25.1; Lgl2 (mouse) mapping to 11 E2.

## SOURCE

LLGL2 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LLGL2 of human origin.

## PRODUCT

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-164884 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

LLGL2 (T-13) is recommended for detection of LLGL2 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 LLGL4.

LLGL2 (T-13) is also recommended for detection of LLGL2 in additional species, including canine and bovine.

Suitable for use as control antibody for LLGL2 siRNA (h): sc-93661, LLGL2 siRNA (m): sc-146759, LLGL2 shRNA Plasmid (h): sc-93661-SH, LLGL2 shRNA Plasmid (m): sc-146759-SH, LLGL2 shRNA (h) Lentiviral Particles: sc-93661-V and LLGL2 shRNA (m) Lentiviral Particles: sc-146759-V.

Molecular Weight of LLGL2: 113 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **LLGL2 (A-4): sc-376857** or **LLGL2 (I-13): sc-101242**, our highly recommended monoclonal alternatives to LLGL2 (T-13).