

LRIG1 (P-16): sc-50076

BACKGROUND

Leucine-rich repeats and immunoglobulin-like domains protein 1, also designated LIG1 or LRIG1, interacts with the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. LRIG1 is a single-pass, type I membrane protein with an ectodomain containing 15 leucine-rich repeats which is sometimes cleaved into N-terminal and C-terminal fragments. LRIG1 is produced in all human glioma cell lines and localizes to perinuclear compartments, cytoplasmic compartments and the cell surface. It acts as a negative feedback regulator of signaling through enhanced receptor ubiquitination and accelerated intracellular degradation. LRIG1 may function as a tumour suppressor since it downregulates the expression of EGF and the related proteins ErbB-2, ErbB-3 and ErbB-4, which all inhibit cancer cells from growth, migration and invasion.

REFERENCES

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- Thomasson, M., Hedman, H., Guo, D., Ljungberg, B. and Henriksson, R. 2003. LRIG1 and epidermal growth factor receptor in renal cell carcinoma: a quantitative RT-PCR and immunohistochemical analysis. *Br. J. Cancer* 89: 1285-1289.
- Laederich, M.B., Funes-Duran, M., Yen, L., Ingalla, E., Wu, X., Carraway, K.L. and Sweeney, C. 2004. The leucine-rich repeat protein LRIG1 is a negative regulator receptor tyrosine kinases. *J. Biol. Chem.* 279: 47050-47056.
- Ljuslinder, I., Malmer, B., Golovleva, I., Thomasson, M., Grankvist, K., Hockenstrom, T., Emdin, S., Jonsson, Y., Hedman, H. and Henriksson, R. 2005. Increased copy number at 3p14 in breast cancer. *Breast Cancer Res.* 7: 719-727.

CHROMOSOMAL LOCATION

Genetic locus: LRIG1 (human) mapping to 3p14.1; Lrig1 (mouse) mapping to 6 D2.

SOURCE

LRIG1 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of LRIG1 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-50076 P, (100 µg 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.

APPLICATIONS

LRIG1 (P-16) is recommended for detection of LRIG1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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); reactive with all isoforms. LRIG1 (P-16) is also recommended for detection of LRIG1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for LRIG1 siRNA (h): sc-60966, LRIG1 siRNA (m): sc-60967, LRIG1 shRNA Plasmid (h): sc-60966-SH, LRIG1 shRNA Plasmid (m): sc-60967-SH, LRIG1 shRNA (h) Lentiviral Particles: sc-60966-V and LRIG1 shRNA (m) Lentiviral Particles: sc-60967-V.

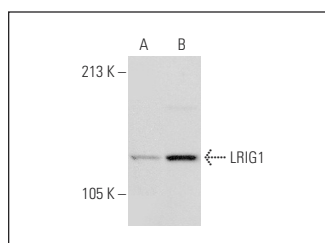
Molecular Weight of LRIG1: 143 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2204.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



LRIG1 (P-16): sc-50076. Western blot analysis of LRIG1 expression in Hep G2 (A) and Jurkat (B) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **LRIG1 (B-2): sc-514577**, our highly recommended monoclonal alternative to LRIG1 (P-16).