

LRIG1 (G-20): sc-50075

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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- Tanemura, A., Nagasawa, T., Inui, S. and Itami, S. 2005. LRIG-1 provides a novel prognostic predictor in squamous cell carcinoma of the skin: immunohistochemical analysis for 38 cases. *Dermatol. Surg.* 31: 423-430.
- Guo, D., Nilsson, J., Haapasalo, H., Raheem, O., Bergenheim, T., Hedman, H. and Henriksson, R. 2006. Perinuclear leucine-rich repeats and immunoglobulin-like domain proteins (LRIG1-3) as prognostic indicators in astrocytic tumors. *Acta Neuropathol.* 111: 238-246.

SOURCE

LRIG1 (G-20) 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-50075 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LRIG1 (G-20) is recommended for detection of LRIG1, LRIG2 and LRIG3 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 isoform 2 of LRIG1.

LRIG1 (G-20) is also recommended for detection of LRIG1, LRIG2 and LRIG3 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of LRIG1: 143 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.

SELECT PRODUCT CITATIONS

- Mao, F., Wang, B., Xiao, Q., Xi, G., Sun, W., Zhang, H., Ye, F., Wan, F., Guo, D., Lei, T. and Chen, X. 2013. A role for LRIG1 in the regulation of malignant glioma aggressiveness. *Int. J. Oncol.* 42: 1081-1087.

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.



Try **LRIG1 (B-2): sc-514577**, our highly recommended monoclonal alternative to LRIG1 (G-20).