

LARG (N-14): sc-15439

BACKGROUND

Leukemia-associated RhoGEF (LARG) is a 1,544 amino acid, guanine nucleotide exchange factor (GEF) that contains a PDZ domain, a LH/RGS domain, and a Dbl homology/pleckstrin homology domain. LARG shares homology with other RhoGEFs, including such oncogenes as DBL, VAV1, TIAM, and BCR. RhoGEFs containing RGS domains are capable of associating with activated G_α subunits, and can function as GTPase activating proteins (GAPs). LARG transcripts have been detected in human peripheral blood leukocytes, spleen, prostate, testis, ovary, small intestine, colon and thymus. The LARG protein may elicit signals through a G protein-coupled receptor (GPCR)-Rho-dependent signaling pathway. Genetic alterations that occur at human chromosome position 11q23.3, where LARG maps, are prevalent in acute leukemias.

CHROMOSOMAL LOCATION

Genetic locus: ARHGEF12 (human) mapping to 11q23.3; Arhgef12 (mouse) mapping to 9 A5.1.

SOURCE

LARG (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of LARG 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-15439 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

LARG (N-14) is recommended for detection of LARG 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LARG (N-14) is also recommended for detection of LARG in additional species, including bovine.

Suitable for use as control antibody for LARG siRNA (h): sc-41800, LARG siRNA (m): sc-41801, LARG shRNA Plasmid (h): sc-41800-SH, LARG shRNA Plasmid (m): sc-41801-SH, LARG shRNA (h) Lentiviral Particles: sc-41800-V and LARG shRNA (m) Lentiviral Particles: sc-41801-V.

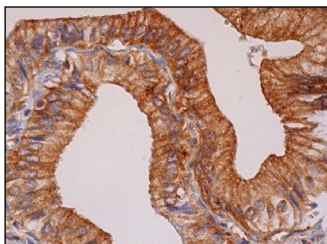
Molecular Weight of LARG: 220 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or HL-60 whole cell lysate: sc-2209.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



LARG (N-14): sc-15439. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic and membrane staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Becknell, B., et al. 2003. Characterization of leukemia-associated Rho guanine nucleotide exchange factor (LARG) expression during murine development. *Cell Tissue Res.* 314: 361-366.
2. Wang, Q., et al. 2004. Thrombin and lysophosphatidic acid receptors utilize distinct RhoGEFs in prostate cancer cells. *J. Biol. Chem.* 279: 28831-28834.
3. Zheng, R., et al. 2006. Neuropeptide-stimulated cell migration in prostate cancer cells is mediated by RhoA kinase signaling and inhibited by neutral endopeptidase. *Oncogene* 25: 5942-5952.
4. Goulmari, P., et al. 2008. LARG and mDia1 link G_{α12/13} to cell polarity and microtubule dynamics. *Mol. Biol. Cell* 19: 30-40.
5. Edelmann, M.J., et al. 2010. Post-translational modification of the deubiquitinating enzyme otubain 1 modulates active RhoA levels and susceptibility to *Yersinia* invasion. *FEBS J.* 277: 2515-2530.

RESEARCH USE

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

MONOS
Satisfaction
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Try **LARG (H-3): sc-166318**, our highly recommended monoclonal alternative to LARG (N-14).