

RASL11B (C-3): sc-365425

BACKGROUND

RASL11B (Ras-like, family 11, member B) is a widely expressed protein with highest levels of expression in placenta and primary macrophages. RASL11B is a Ras-related GTPase and belongs to a Ras subfamily of potential tumor suppressors. Although it shares a high degree of similarity with Ras proteins, RASL11B lacks the characteristic prenylation sites of Ras proteins. Members of the Ras superfamily of small molecular weight GTPases play diverse and critical roles in mediating cellular responses to extracellular stimuli, including mitogenesis, cytoskeletal maintenance and rearrangement, and integrin activation. RASL11B is believed to localize to the cytoplasm and, as is suggested by its TGF β 1-induced expression, may participate in TGF β 1-regulated developmental processes. In addition, RASL11B may contribute to conditions such as inflammation, arteriosclerosis and cancer.

REFERENCES

1. Wes, P.D., et al. 1996. RIC, a calmodulin-binding Ras-like GTPase. *EMBO J.* 15: 5839-5848.
2. Roa, M., et al. 1997. Involvement of the Ras-like GTPase Rab3d in RBL-2H3 mast cell exocytosis following stimulation via high affinity IgE receptors (Fc ϵ RI). *J. Immunol.* 159: 2815-2823.
3. Abdellatif, M., et al. 1997. An effector-like function of Ras GTPase-activating protein predominates in cardiac muscle cells. *J. Biol. Chem.* 272: 525-533.

CHROMOSOMAL LOCATION

Genetic locus: RASL11B (human) mapping to 4q12, RASL11A (human) mapping to 13q12.2; Rasl11b (mouse) mapping to 5 C3.3, Rasl11a (mouse) mapping to 5 G3.

SOURCE

RASL11B (C-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 217-243 near the C-terminus of RASL11B of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RASL11B (C-3) is available conjugated to agarose (sc-365425 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365425 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365425 PE), fluorescein (sc-365425 FITC), Alexa Fluor[®] 488 (sc-365425 AF488), Alexa Fluor[®] 546 (sc-365425 AF546), Alexa Fluor[®] 594 (sc-365425 AF594) or Alexa Fluor[®] 647 (sc-365425 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-365425 AF680) or Alexa Fluor[®] 790 (sc-365425 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365425 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

RASL11B (C-3) is recommended for detection of RASL11B and RASL11A of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

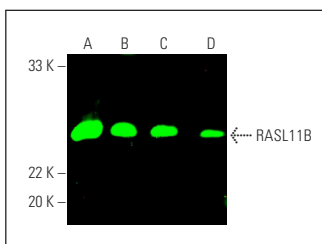
Molecular Weight of RASL11B: 27 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, SH-SY5Y cell lysate: sc-3812 or IMR-32 cell lysate: sc-2409.

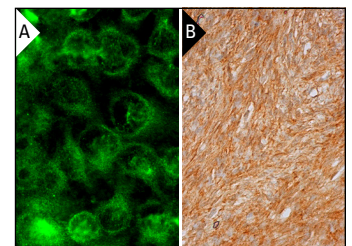
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



RASL11B (C-3): sc-365425. Near-Infrared western blot analysis of RASL11B expression in K-562 (A), IMR-32 (B), SH-SY5Y (C) and NIH/3T3 (D) whole cell lysates. Blocked with UltraCruz[®] Blocking Reagent: sc-516214. Detection reagent used: m-IgG κ BP-CFL 680: sc-516180.



RASL11B (C-3): sc-365425. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing cytoplasmic staining of ovarian stroma cells (B).

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 for detailed protocols and support products.