

# Rab GAP1L (L-12): sc-162061

## BACKGROUND

Rab GAP1L (RAB GTPase activating protein 1-like), also known as HHL or TBC1D18, is an 815 amino acid protein that contains one PID domain and one Rab-GAP TBC domain. Expressed as multiple alternatively spliced isoforms, Rab GAP1L is upregulated in esophageal squamous cell carcinoma, suggesting a role in tumor formation and metastasis. Conversely, Rab GAP1L expression is strongly inhibited in patients affected with Alzheimer's disease, implicating that Rab GAP1L may be involved in normal brain function. The gene encoding Rab GAP1L maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

## REFERENCES

1. Ishikawa, K., et al. 1997. Prediction of the coding sequences of unidentified human genes. VIII. 78 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 4: 307-313.
2. Seki, N., et al. 1997. Characterization of cDNA clones in size-fractionated cDNA libraries from human brain. *DNA Res.* 4: 345-349.
3. Hidaka, M., et al. 2000. Gene trapping of two novel genes, Hzf and Hhl, expressed in hematopoietic cells. *Mech. Dev.* 90: 3-15.
4. Sharma, R., et al. 2003. Transcriptional gene expression profile of human esophageal squamous cell carcinoma. *Genomics* 81: 481-488.
5. de Yebra, L., et al. 2004. Reduced KIAA0471 mRNA expression in Alzheimer's patients: a new candidate gene product linked to the disease? *Hum. Mol. Genet.* 13: 2607-2612.

## CHROMOSOMAL LOCATION

Genetic locus: RABGAP1L (human) mapping to 1q25.1; Rabgap1l (mouse) mapping to 1 H2.1.

## SOURCE

Rab GAP1L (L-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Rab GAP1L 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-162061 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

Rab GAP1L (L-12) is recommended for detection of Rab GAP1L 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), 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); non cross-reactive with Rab GAP1.

Rab GAP1L (L-12) is also recommended for detection of Rab GAP1L in additional species, including canine, porcine and avian.

Suitable for use as control antibody for Rab GAP1L siRNA (h): sc-78718, Rab GAP1L siRNA (m): sc-152655, Rab GAP1L shRNA Plasmid (h): sc-78718-SH, Rab GAP1L shRNA Plasmid (m): sc-152655-SH, Rab GAP1L shRNA (h) Lentiviral Particles: sc-78718-V and Rab GAP1L shRNA (m) Lentiviral Particles: sc-152655-V.

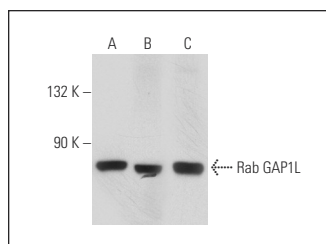
Molecular Weight of Rab GAP1L: 93 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, mouse heart extract: sc-2254 or Daudi cell lysate: sc-2415.

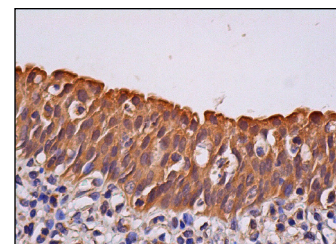
## RECOMMENDED SECONDARY REAGENTS

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

## DATA



Rab GAP1L (L-12): sc-162061. Western blot analysis of Rab GAP1L expression in HL-60 (A) and Daudi (B) whole cell lysates and mouse heart tissue extract (C).



Rab GAP1L (L-12): sc-162061. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic staining of urothelial cells.

## RESEARCH USE

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