

Rab L3 (Q-14): sc-103134

BACKGROUND

Rab L3 (RAB-like protein 3) is a 236 amino acid protein that belongs to the small GTPase superfamily and the Rab family. A large family of small GTPases, Rab proteins play important roles in multiple processes relating to cellular transportation and modulation of the cytoskeleton. Rab L3 is considered a novel oncogene that regulates behavior of human cancer cells and may be a candidate for anti-tumor treatment. The Rab L3 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, fruit fly, mosquito and *C. elegans*, and maps to human chromosome 3q13.33. Chromosome 3 is made up of about 214 million bases encoding over 1,100 genes. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, Brugada syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

- Collins, J.E., et al. 1995. Epithelial differentiation in the mouse preimplantation embryo: making adhesive cell contacts for the first time. *Trends Biochem. Sci.* 20: 307-312.
- Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. *Proc. Natl. Acad. Sci. USA* 97: 206-211.
- Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
- Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
- Nareyeck, G., et al. 2006. Establishment and characterization of two uveal melanoma cell lines derived from tumors with loss of one chromosome 3. *Exp. Eye Res.* 83: 858-864.
- Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.
- Li, Q., et al. 2010. Evaluation of the novel gene Rabl3 in the regulation of proliferation and motility in human cancer cells. *Oncol. Rep.* 24: 433-440.

CHROMOSOMAL LOCATION

Genetic locus: RABL3 (human) mapping to 3q13.33; Rabl3 (mouse) mapping to 16 B3.

SOURCE

Rab L3 (Q-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of Rab L3 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103134 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Rab L3 (Q-14) is recommended for detection of Rab L3 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 other Rab family members.

Suitable for use as control antibody for Rab L3 siRNA (h): sc-78451, Rab L3 siRNA (m): sc-152658, Rab L3 shRNA Plasmid (h): sc-78451-SH, Rab L3 shRNA Plasmid (m): sc-152658-SH, Rab L3 shRNA (h) Lentiviral Particles: sc-78451-V and Rab L3 shRNA (m) Lentiviral Particles: sc-152658-V.

Molecular Weight of Rab L3: 26 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.