

ARL17 (H-94): sc-292486

BACKGROUND

ADP-ribosylation factors (ARFs) are highly conserved guanine nucleotide binding proteins that enhance the ADP-ribosyltransferase activity of Cholera Toxin. ARFs are important in eukaryotic vesicular trafficking pathways and they play an essential role in the activation of phospholipase D (PC-PLD). ARL17 (ADP-ribosylation factor-like protein 17), also known as ARF1P2 or ARL17P1, is a 177 amino acid member of the ARF protein family. In human, there are two genes which have been identified as ARL17A and ARL17B that code for identical proteins and colocalize at chromosomal position 17q21.31. ARL17 functions as an activator of the cholera toxin catalytic subunit, an ADP-ribosyltransferase. Localized to the Golgi apparatus, ARL17 may also be involved in the modulation of vesicle budding and uncoating within the Golgi. ARL17 is expressed as three isoforms produced by alternative splicing events.

REFERENCES

1. Pasqualato, S., et al. 2002. Arf, Arl, Arp and Sar proteins: a family of GTP-binding proteins with a structural device for 'front-back' communication. *EMBO Rep.* 3: 1035-1041.
2. Louro, R., et al. 2004. RASL11A, member of a novel small monomeric GTPase gene family, is down-regulated in prostate tumors. *Biochem. Biophys. Res. Commun.* 316: 618-627.
3. Okai, T., et al. 2004. Novel small GTPase subfamily capable of associating with tubulin is required for chromosome segregation. *J. Cell Sci.* 117: 4705-4715.
4. Kahn, R.A., et al. 2005. Arf family GTPases: roles in membrane traffic and microtubule dynamics. *Biochem. Soc. Trans.* 33: 1269-1272.
5. Kahn, R.A., et al. 2006. Nomenclature for the human Arf family of GTP-binding proteins: ARF, ARL, and SAR proteins. *J. Cell Biol.* 172: 645-650.
6. Hofmann, I. and Munro, S. 2006. An N-terminally acetylated Arf-like GTPase is localised to lysosomes and affects their motility. *J. Cell Sci.* 119: 1494-1503.

CHROMOSOMAL LOCATION

Genetic locus: ARL17B/ARL17A (human) mapping to 17q21.31.

SOURCE

ARL17 (H-94) is a rabbit polyclonal antibody raised against amino acids 84-177 mapping at the C-terminus of ARL17 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.

STORAGE

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

APPLICATIONS

ARL17 (H-94) is recommended for detection of ARL17A and ARL17B variants of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with NBR2 (neighbor of BRCA1 gene 2).

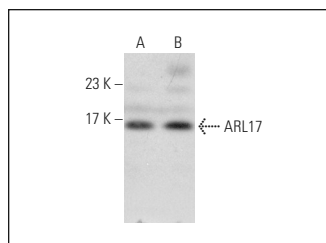
Molecular Weight of ARL17: 19 kDa.

Positive Controls: NCI-H460 whole cell lysate: sc-364235 or Hep G2 cell lysate: sc-2227.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ARL17 (H-94): sc-292486. Western blot analysis of ARL17 expression in NCI-H460 (A) and Hep G2 (B) whole cell lysates.

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.