SANTA CRUZ BIOTECHNOLOGY, INC.

ARL7 (E-13): sc-107429



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 play an essential role in the activation of phospholipase D (PC-PLD). ARL7 (ADP ribosylation factor-like protein 7), also known as LAK or ARL4C, is a 192 amino acid nuclear protein belonging to the small GTPase superfamily and the Arf family of proteins. ARL7 is the only ARF- and ARL-family member whose mRNA-expression is induced by liver X-receptor-retinoid X-receptor agonists or cholesterol loading in human macrophages. ARL7 may play a role in the AI (apoA-I)-dependent cholesterol secretion process and may modulate intracellular vesicular transport via interaction with microtubules.

REFERENCES

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- 3. Pasqualato, S., et al. 2002. Arf, Arl, Arp and Sar proteins: a family of GTPbinding proteins with a structural device for 'front-back' communication. EMBO Rep. 3: 1035-1041.
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- 7. 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.
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CHROMOSOMAL LOCATION

Genetic locus: ARL4C (human) mapping to 2q37.1; Arl4c (mouse) mapping to 1 D.

SOURCE

ARL7 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARL7 of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107429 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARL7 (E-13) is recommended for detection of ARL7 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 ARL family members.

ARL7 (E-13) is also recommended for detection of ARL7 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for ARL7 siRNA (h): sc-94425, ARL7 siRNA (m): sc-141248, ARL7 shRNA Plasmid (h): sc-94425-SH, ARL7 shRNA Plasmid (m): sc-141248-SH, ARL7 shRNA (h) Lentiviral Particles: sc-94425-V and ARL7 shRNA (m) Lentiviral Particles: sc-141248-V.

Molecular Weight of ARL7: 24 kDa.

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.

STORAGE

Store at 4° C, **D0 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 or our catalog for detailed protocols and support products.