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ARL2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16648c

Product Information

Application	WB, E
Primary Accession	P36404
Other Accession	O08697, Q9D0J4, Q06849, Q2TA37, NP_001658.2
Reactivity	Human
Predicted	Bovine, Drosophila, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36193
Calculated MW	20878
Antigen Region	54-82

Additional Information

Gene ID	402
Other Names	ADP-ribosylation factor-like protein 2, ARL2
Target/Specificity	This ARL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 54-82 amino acids from the Central region of human ARL2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ARL2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ARL2
Function	Small GTP-binding protein which cycles between an inactive GDP-bound and an active GTP-bound form, and the rate of cycling is regulated by guanine nucleotide exchange factors (GEF) and GTPase- activating proteins (GAP).

GTP-binding protein that does not act as an allosteric activator of the cholera toxin catalytic subunit. Regulates formation of new microtubules and centrosome integrity. Prevents the TBCD-induced microtubule destruction. Participates in association with TBCD, in the disassembly of the apical junction complexes. Antagonizes the effect of TBCD on epithelial cell detachment and tight and adherens junctions disassembly. Together with ARL2, plays a role in the nuclear translocation, retention and transcriptional activity of STAT3. Component of a regulated secretory pathway involved in Ca(2+)-dependent release of acetylcholine. Required for normal progress through the cell cycle (PubMed:10831612, PubMed:16525022, PubMed:18234692, PubMed:18588884, PubMed:20740604). Also regulates mitochondrial integrity and function (PubMed:30945270).

Cellular Location

Mitochondrion intermembrane space. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Cytoplasm. Note=The complex formed with ARL2BP, ARL2 and SLC25A6 is expressed in mitochondria. The complex formed with ARL2BP, ARL2 and SLC25A4 is expressed in mitochondria (By similarity). Not detected in the Golgi, nucleus and on the mitotic spindle. Centrosome-associated throughout the cell cycle Not detected to interphase microtubules {ECO:0000250|UniProtKB:O08697}

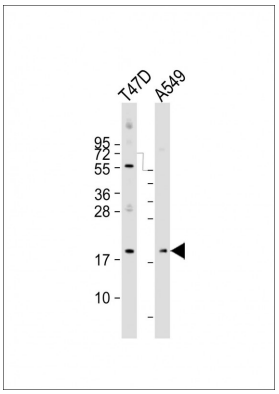
Background

This gene encodes a small GTP-binding protein of the RAS superfamily which functions as an ADP-ribosylation factor (ARF). The encoded protein is one of a functionally distinct group of ARF-like genes.

References

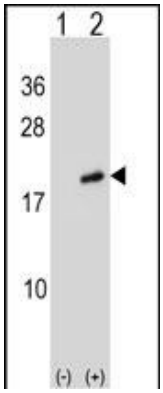
Zhang, T., et al. Structure 17(4):602-610(2009)
Beghin, A., et al. Cell Cycle 7(19):3074-3082(2008)
Veltel, S., et al. FEBS Lett. 582(17):2501-2507(2008)
Shultz, T., et al. FASEB J. 22(1):168-182(2008)
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)

Images



All lanes : Anti-ARL2 Antibody (Center) at 1:2000 dilution Lane 1: T47D whole cell lysate Lane 2: A549 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Western blot analysis of ARL2 (arrow) using rabbit polyclonal ARL2 Antibody (Center) (Cat. #AP16648c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the ARL2 gene.



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