

ARL2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16648c

Specification

ARL2 Antibody (Center) - Product Information

Application WB,E
Primary Accession P36404

Other Accession <u>008697, Q9D0I4, Q06849, Q2TA37</u>,

NP_001658.2

Reactivity Human

Predicted Bovine, Drosophila, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 20878
Antigen Region 54-82

ARL2 Antibody (Center) - 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~~1:2000

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.

ARL2 Antibody (Center) - 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

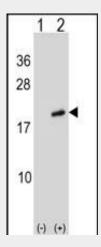
Mitochondrion intermembrane space. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Cytoplasm. Note=The complex formed with ARL2BP, ARL2 and SLC25A6 is expressed in mitochondria. The complex formed with ARL2BP, ARL2 and SLC25A4 is expressed in mitochondria (By similarity). 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}

ARL2 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

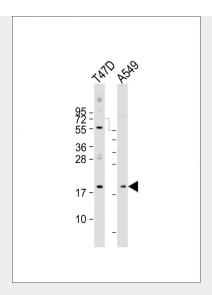
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ARL2 Antibody (Center) - Images



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.





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 μ g 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.

ARL2 Antibody (Center) - 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.

ARL2 Antibody (Center) - 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)