

Goat Anti-ARL2 Antibody

Peptide-affinity purified goat antibody Catalog # AF1101a

Specification

Goat Anti-ARL2 Antibody - Product Information

Application WB
Primary Accession P36404

Other Accession NP_001658, 402

Reactivity
Predicted
Dog
Host
Clonality
Polyclonal

Concentration 100ug/200ul Isotype IgG
Calculated MW 20878

Goat Anti-ARL2 Antibody - Additional Information

Gene ID 402

Other Names

ADP-ribosylation factor-like protein 2, ARL2

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-ARL2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ARL2 Antibody - 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

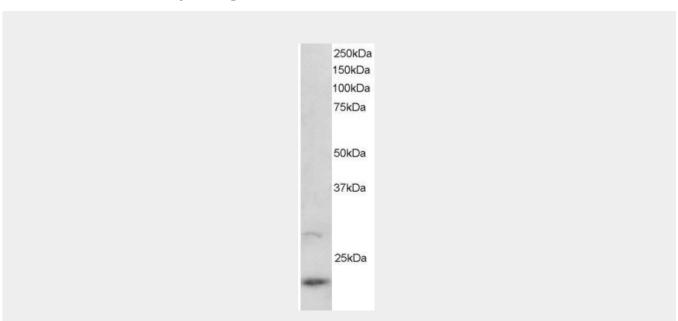
Mitochondrion intermembrane space. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Cytoplasm. Note=The complex formed with ARL2BP, ARL2 and SLC25A6 is expressed in mitochondria. The complex formed with ARL2BP, ARL2 and SLC25A4 is expressed in mitochondria (By similarity).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

Goat Anti-ARL2 Antibody - Protocols

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

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

Goat Anti-ARL2 Antibody - Images



AF1101a staining (2 μ g/ml) of U937 lysate (RIPA buffer, 30 μ g total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



Goat Anti-ARL2 Antibody - 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.

Goat Anti-ARL2 Antibody - References

Crystal structure of the ARL2-GTP-BART complex reveals a novel recognition and binding mode of small GTPase with effector. Zhang T, et al. Structure, 2009 Apr 15. PMID 19368893.

Expression of Arl2 is associated with p53 localization and chemosensitivity in a breast cancer cell line. B\[]ghin A, et al. Cell Cycle, 2008 Oct. PMID 18818514.

Specificity of Arl2/Arl3 signaling is mediated by a ternary Arl3-effector-GAP complex. Veltel S, et al. FEBS Lett, 2008 Jul 23. PMID 18588884.

Beta-tubulin cofactor D and ARL2 take part in apical junctional complex disassembly and abrogate epithelial structure. Shultz T, et al. FASEB J, 2008 Jan. PMID 17704193.

ADP ribosylation factor like 2 (Arl2) protein influences microtubule dynamics in breast cancer cells. Beghin A, et al. Exp Cell Res, 2007 Feb 1. PMID 17188265.