

ARL2 Antibody (N-term) Blocking Peptide Synthetic peptide

Catalog # BP2305a

Specification

ARL2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Other Accession

P36404 NP_001658

ARL2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 402

Other Names ADP-ribosylation factor-like protein 2, ARL2

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP2305a was selected from the N-term region of human ARL2 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ARL2 Antibody (N-term) Blocking Peptide - 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



```
href="http://www.uniprot.org/citations/16525022" target="_blank">16525022</a>, PubMed:<a
href="http://www.uniprot.org/citations/18234692" target="_blank">18234692</a>, PubMed:<a
href="http://www.uniprot.org/citations/18588884" target="_blank">18588884</a>, PubMed:<a
href="http://www.uniprot.org/citations/20740604" target="_blank">20740604</a>). Also
regulates mitochondrial integrity and function (PubMed:<a
href="http://www.uniprot.org/citations/30945270" target="_blank">30945270</a>).
```

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:008697}

ARL2 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

ARL2 Antibody (N-term) Blocking Peptide - Images

ARL2 Antibody (N-term) Blocking Peptide - Background

ADP-ribosylation factors (ARFs) regulate intracellular vesicular membrane trafficking and stimulate a phospholipase D isoform. ARL (ADP-ribosylation like factor) proteins are very similar in sequence to ARFs. ARFs and ARF-like (ARL) proteins, which share sequence similarity with ARFs, form a subfamily of the Ras-related GTPase superfamily. ARL2 encodes a ubiquitiously expressed 184-amino acid predicted protein that is 76% identical to ARF1 and 40 to 45% identical to the Drosophila ARL proteins. Recombinant ARL2 binds to GTP rapidly but guanine nucleotide exchange does not require phospholipids, which is a characteristic of the ARF proteins.

ARL2 Antibody (N-term) Blocking Peptide - References

Antoshechkin, I., et al., Dev. Cell 2(5):579-591 (2002).Bhamidipati, A., et al., J. Cell Biol. 149(5):1087-1096 (2000).Clark, J., et al., Proc. Natl. Acad. Sci. U.S.A. 90(19):8952-8956 (1993).