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ARL3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2306B

Specification

ARL3 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P36405
Other Accession	NP_004302
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**20456**
Antigen Region	**144-173**

ARL3 Antibody (C-term) - Additional Information

Gene ID 403

Other Names
ADP-ribosylation factor-like protein 3, ARL3, ARFL3

Target/Specificity
This ARL3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 144-173 amino acids from the C-terminal region of human ARL3.

Dilution
WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
ARL3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ARL3 Antibody (C-term) - Protein Information

Name ARL3

Synonyms ARFL3

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) (PubMed:16525022, PubMed:18588884). Required for normal cytokinesis and cilia signaling (PubMed:22085962). Requires assistance from GTPase-activating proteins (GAPs) like RP2 and PDE6D, in order to cycle between inactive GDP-bound and active GTP-bound forms. Required for targeting proteins to the cilium, including myristoylated NPHP3 and prenylated INPP5E (PubMed:30269812). Targets NPHP3 to the ciliary membrane by releasing myristoylated NPHP3 from UNC119B cargo adapter into the cilium (PubMed:22085962). Required for PKD1:PKD2 complex targeting from the trans-Golgi network to the cilium (By similarity).

Cellular Location
Golgi apparatus membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton, spindle. Nucleus Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Cytoplasm. Cell projection, cilium Note=Detected predominantly in the photoreceptor connecting cilium Present on the mitotic spindle. Centrosome-associated throughout the cell cycle. Not detected to interphase microtubules

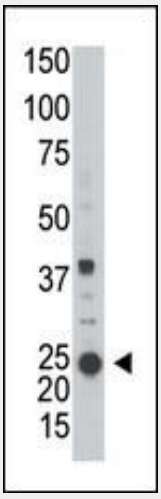
Tissue Location
Expressed in the retina. Strongly expressed in connecting cilium, the myoid region of the inner segments (IS) and in cone photoreceptors (at protein level).

ARL3 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ARL3 Antibody (C-term) - Images



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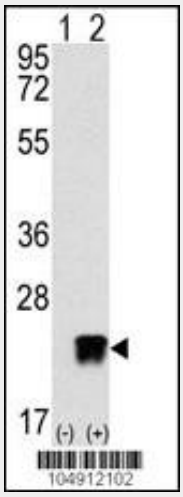
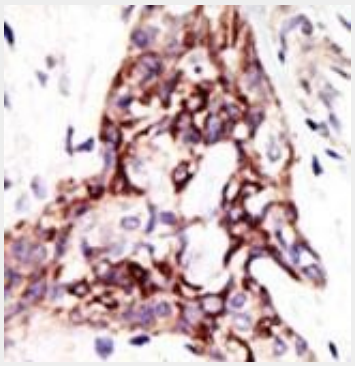
Western blot analysis of anti-ARL3 (Cat. #AP2306b) in A2058 cell line lysate (35ug/lane).ARL3 (arrow) was detected using the purified Pab.



Western blot analysis of ARL3 (arrow) using rabbit polyclonal ARL3 Antibody (C-term) (Cat.#AP2306b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ARL3 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

ARL3 Antibody (C-term) - Background

ADP-ribosylation factors (ARFs) are low molecular weight GTP-binding proteins belonging to the RAS superfamily. The predicted 182-amino acid ARL3 (ADP-ribosylation like factor) protein shares 97% amino acid identity with rat ARLl3 and 43% identity with human ARF1. Like the ARFs, ARL3 has a glycine at position 2, the site of N myristoylation, and lacks cysteine residues near the C terminus, which are found in other members of the RAS family. Northern blot analysis detected a 1-kb ARL3 transcript in all tissues tested, with highest expression in heart and lung, and lower expression in brain, liver, kidney, ovary, and testis. A 5.5-kb transcript was also detected in most tissues, with highest expression in brain. Immunoblot analysis detected ARL3 in human tumor cell lines but not in normal rodent cells. Although ARL3 binds GTP, it is devoid of activity in the cholera toxin-dependent ADP-ribosylation of Gs, and is therefore classified as an ARF-like protein.

ARL3 Antibody (C-term) - References

Cavenagh, M.M., et al., J. Biol. Chem. 269(29):18937-18942 (1994).
Adams, M.D., et al., Nature 377 (6547 Suppl), 3-174 (1995).
Kim, H.S., Cytogenet. Cell Genet. 83 (3-4), 246 (1998).

Wistow, G., et al., Mol. Vis. 8, 196-204 (2002).