

ARL3 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2306A

Specification

ARL3 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	P36405
Other Accession	Q8QHI3 , P37996 , Q52NJ4 , Q9WUL7 , Q2TBW6 , NP_004302
Reactivity	Human
Predicted	Bovine, Mouse, Pig, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	20456
Antigen Region	1-30

ARL3 Antibody (N-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 1-30 amino acids from the N-terminal region of human ARL3.

Dilution

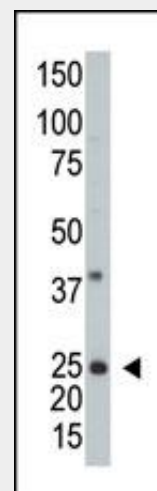
WB~1:1000

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.



Western blot analysis of anti-hARL3 -M1 Pab (Cat. #AP2306a) in A2058 cell line lysate (35ug/lane). hARL3 -M1 (arrow) was detected using the purified Pab.

ARL3 Antibody (N-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 ARL3 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.

Precautions

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

ARL3 Antibody (N-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

ARL3 Antibody (N-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).

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 (N-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 Cytometry](#)
- [Cell Culture](#)