

# ARL3 (K-16): sc-66331

## BACKGROUND

ADP-ribosylation factors (ARFs) are highly conserved guanine nucleotide-binding proteins that enhance the ADP-ribosyltransferase activity of cholera toxin. ARFs are important in eukaryotic vesicular trafficking pathways and activating phospholipase D. ARL3 (ADP-ribosylation factor-like protein 3), also known as ARFL3, is a member of the ARF-like protein (ARL) subfamily of small GTPases. Unlike ARFs, ARL3 does not activate the cholera toxin ADP-ribosyltransferase. ARL3 is ubiquitously expressed. It binds to PDE6D and interacts with RP2 (retinitis pigmentosa 2 protein) in the presence of GTP- $\gamma$ -S. ARL3 may play a role in maintaining rod photoreceptor cells and regulating microtubule-dependent processes. Knockdown of ARL3 leads to altered cell morphology, failure of cytokinesis, acetylation of  $\alpha$  Tubulin and an increase in binucleated cells.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ARL3 (human) mapping to 10q24.32; Arl3 (mouse) mapping to 19 C3.

## SOURCE

ARL3 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ARL3 of human origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66331 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ARL3 (K-16) is recommended for detection of ARL3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ARL3 (K-16) is also recommended for detection of ARL3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ARL3 siRNA (h): sc-61990, ARL3 siRNA (m): sc-61991, ARL3 shRNA Plasmid (h): sc-61990-SH, ARL3 shRNA Plasmid (m): sc-61991-SH, ARL3 shRNA (h) Lentiviral Particles: sc-61990-V and ARL3 shRNA (m) Lentiviral Particles: sc-61991-V.

Molecular Weight of ARL3: 21 kDa.

Positive Controls: PC-12 cell lysate: sc-2250 or NIH/3T3 whole cell lysate: sc-2210.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.