## BACKGROUND

ADP-ribosylation factors (ARFs) are highly conserved guanine nucleotide binding proteins that enhance the ADP-ribosyltransferase activity of Cholera Toxin. ARF's are important in eukaryotic vesicular trafficking pathways and they play an essential role in the activation of phospholipase D (PC-PLD). ARL13B (ADPribosylation factor-like 13B), also known as ARL2L1 or JBTS8, is a 428 amino acid protein that belongs to the ARL subfamily of ARF-like GTPases and is thought to be involved in cilia formation. Defects in the gene encoding ARL13B are associated with Joubert syndrome (JS), a rare genetic disorder of the brain that is characterized by an underdeveloped cerebellum and brain stem and often leads to ataxia, abnormal breathing and seizures.

## REFERENCES

1. Online Mendelian Inheritance in Man, OMIM ${ }^{\text {TM }}$. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608922. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
2. Fan, Y., et al. 2004. Mutations in a member of the Ras superfamily of small GTP-binding proteins causes Bardet-Biedl syndrome. Nat. Genet. 36: 989-993.

## CHROMOSOMAL LOCATION

Genetic locus: ARL13B (human) mapping to 3q11.2; Arl13b (mouse) mapping to 16 C1.3.

## SOURCE

ARL13B (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C -terminus of ARL13B of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-102318 P, (100 $\mu \mathrm{g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA})$.

## APPLICATIONS

ARL13B (L-15) is recommended for detection of ARL13B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [ $1-2 \mu \mathrm{~g}$ per 100-500 $\mu \mathrm{g}$ of total protein ( 1 ml of cell lysate)], 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); non cross-reactive with other ARL family members.
ARL13B (L-15) is also recommended for detection of ARL13B in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for ARL13B siRNA (h): sc-78165, ARL13B siRNA (m): sc-141239, ARL13B shRNA Plasmid (h): sc-78165-SH, ARL13B shRNA Plasmid (m): sc-141239-SH, ARL13B shRNA (h) Lentiviral Particles: $\mathrm{sc}-78165-\mathrm{V}$ and ARL13B shRNA (m) Lentiviral Particles: sc-141239-V.

Molecular Weight of ARL13B: 49 kDa .
Positive Controls: ARL13B (h): 293T Lysate: sc-369564.

## 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 MarkerTM 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 ( 0.5 ml agarose/ 2.0 ml ). 3) 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 ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## DATA



ARL13B (L-15): sc-102318. Western blot analysis of ARL13B expression in non-transfected: sc-117752 (A) and human ARL13B transfected: sc-369564 (B) 293T whole cell lysates.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, ${ }^{* *}$ DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

Satisfation Guaranteed

Try ARL13B (6F11): sc-293467, our highly recommended monoclonal alternative to ARL13B (L-15).

