SANTA CRUZ BIOTECHNOLOGY, INC.

ARL13B (L-15): sc-102318



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[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608922. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 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 μg lgG 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 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% 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 μ g per 100-500 μ 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: sc-78165-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 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) 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™ 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° 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.



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