

ARL5A/5B/5C (H-113): sc-292437

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 play an essential role in the activation of phospholipase D (PC-PLD). ARL5 (ADP-ribosylation factor-like protein 5), also known as ARFLP5 or ARL5A, is a 179 amino acid member of the ARF protein family. Unlike many ARF family members, ARL5A is thought to lack ADP-ribosylation enhancing activity. Localized to the nucleus, ARL5A has been found to interact with HP1 α , indicating that it is developmentally regulated and has a possible role in nuclear dynamics and embryonic development signaling cascades. Expressed in brain, heart, lung, cartilage and kidney, but not in spleen, ARL5B is most closely related to ARL5A, with which it shares 80% sequence identity. ARL5B (ADP-ribosylation factor-like protein 8), also known as ARL8, is a 179 amino acid protein that belongs to the RAS superfamily of regulatory GTPases. Human ARL5B shares 100% identity with mouse *Arl5b* and 71% identity with the *Drosophila* homolog. Two isoforms of ARL5B exist as a result of alternative splicing events.

REFERENCES

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4. Online Mendelian Inheritance in Man, OMIM[™]. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608909. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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SOURCE

ARL5A/5B/5C (H-113) is a rabbit polyclonal antibody raised against amino acids 1-113 mapping at the N-terminus of ARL5B of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

ARL5A/5B/5C (H-113) is recommended for detection of ARL5A, ARL5B and ARL5C 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).

ARL5A/5B/5C (H-113) is also recommended for detection of ARL5A, ARL5B and ARL5C in additional species, including equine, porcine and avian.

Molecular Weight of ARL5: 21 kDa.

Molecular Weight of ARL8: 20 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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 or our catalog for detailed protocols and support products.