

ARL5A/5B (E-11): sc-109506

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, ARL5 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. ARL8 (ADP-ribosylation factor-like protein 8), also known as ARL5B, is a 179 amino acid protein that belongs to the RAS superfamily of regulatory GTPases. Human ARL5B shares 100% identity with mouse *Arl8* and 71% identity with the *Drosophila* homolog. Two isoforms of ARL5B exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ARL5A (human) mapping to 2q23.3, ARL5B (human) mapping to 10p12.31; ARL5a (mouse) mapping to 2 C1.1, ARL5b (mouse) mapping to 2 A2

SOURCE

ARL5A/5B (E-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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.

Blocking peptide available for competition studies, sc-109506 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARL5A/5B (E-11) is recommended for detection of ARL5A and ARL5B 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).

ARL5A/5B (E-11) is also recommended for detection of ARL5A and ARL5B in additional species, including equine, canine, bovine 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 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.

RESEARCH USE

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

STORAGE

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



Try **ARL5A (G-9): sc-514680** or **ARL8A/B (H-8): sc-398635**, our highly recommended monoclonal alternatives to ARL5A/5B (E-11).