

# ARL5A/5B (G-12): sc-109507

## 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, ARL5 has been found to interact with HP1 $\alpha$ , 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, ARL8 is most closely related to ARL5, 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 ARL8 shares 100% identity with mouse *Arl8* and 71% identity with the *Drosophila* homolog. Two isoforms of ARL8 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 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARL8 of human origin.

## 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-109507 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ARL5A/5B (G-12) 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), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

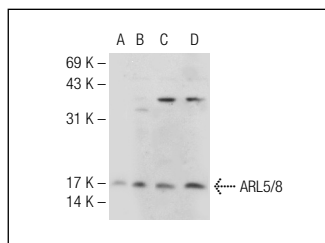
ARL5/8 (G-12) is also recommended for detection of ARL5A and ARL5B in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of ARL5: 21 kDa.

Molecular Weight of ARL8: 20 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237, IMR-32 cell lysate: sc-2409 or THP-1 cell lysate: sc-2238.

## DATA



ARL5/8 (G-12): sc-109507. Western blot analysis of ARL5/8 expression in AML-193 (A), THP-1 (B), SK-N-MC (C) and IMR-32 (D) 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.

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Satisfaction  
Guaranteed

Try **ARL5A (G-9): sc-514680** or **ARL8A/B (H-8): sc-398635**, our highly recommended monoclonal alternatives to ARL5A/5B (G-12).