ARL8B (h): 293T Lysate: sc-113826



The Power to Question

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 they play an essential role in the activation of phospholipase D (PC-PLD). ARL8B (ADP-ribosylation factor-like protein 8B), also known as ARL10C or GIE1, is a 186 amino acid protein that localizes to the late endosome membrane and belongs to the ARL family of ARF-like GTPase proteins. Expressed ubiquitously, ARL8A interacts with Tubulin and is thought to play a role in lysosome motility, as well as in chromosomal segregation. The gene encoding ARL8B maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

- Secombe, J. and Parkhurst, S.M. 2004. *Drosophila* Topors is a RING fingercontaining protein that functions as a ubiquitin-protein isopeptide ligase for the hairy basic helix-loop-helix repressor protein. J. Biol. Chem. 279: 17126-17133.
- Okai, T., Araki, Y., Tada, M., Tateno, T., Kontani, K. and Katada, T. 2004. Novel small GTPase subfamily capable of associating with Tubulin is required for chromosome segregation. J. Cell Sci. 117: 4705-4715.
- 3. Burd, C.G., Strochlic, T.I. and Gangi Setty, S.R. 2004. Arf-like GTPases: not so Arf-like after all. Trends Cell Biol. 14: 687-694.
- 4. Kahn, R.A., Volpicelli-Daley, L., Bowzard, B., Shrivastava-Ranjan, P., Li, Y., Zhou, C. and Cunningham, L. 2005. Arf family GTPases: roles in membrane traffic and microtubule dynamics. Biochem. Soc. Trans. 33: 1269-1272.
- Bagshaw, R.D., Callahan, J.W. and Mahuran, D.J. 2006. The Arf-family protein, Arl8b, is involved in the spatial distribution of lysosomes. Biochem. Biophys. Res. Commun. 344: 1186-1191.
- Haraguchi, T., Yanaka, N., Nogusa, Y., Sumiyoshi, N., Eguchi, Y. and Kato, N. 2006. Expression of ADP-ribosylation factor-like protein 8B mRNA in the brain is down-regulated in mice fed a high-fat diet. Biosci. Biotechnol. Biochem. 70: 1798-1802.
- 7. Kahn, R.A., Cherfils, J., Elias, M., Lovering, R.C., Munro, S. and Schurmann, A. 2006. Nomenclature for the human Arf family of GTP-binding proteins: ARF, ARL, and SAR proteins. J. Cell Biol. 172: 645-650.
- 8. Hofmann, I. and Munro, S. 2006. An N-terminally acetylated Arf-like GTPase is localised to lysosomes and affects their motility. J. Cell Sci. 119: 1494-1503.

CHROMOSOMAL LOCATION

Genetic locus: ARL8B (human) mapping to 3p26.1.

PRODUCT

ARL8B (h): 293T Lysate represents a lysate of human ARL8B transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

ARL8B (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive ARL8B antibodies. Recommended use: 10-20 ul per lane.

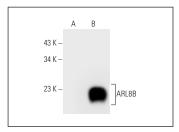
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

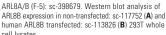
ARL8A/B (F-5): sc-398679 is recommended as a positive control antibody for Western Blot analysis of enhanced human ARL8B expression in ARL8B transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

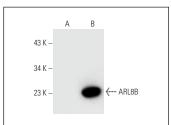
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA







ARL8A/B (H-8): sc-398635. Western blot analysis of ARL8B expression in non-transfected: sc-117752 (**A**) and human ARL8B transfected: sc-113826 (**B**) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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