

Centaurin $\gamma 3$ (h): 293T Lysate: sc-177048

BACKGROUND

ADP-ribosylation factor (ARF) family of small GTP-binding proteins are involved in vesicular transport regulation and in controlling cytoskeletal organization and cell adhesion. These proteins are best characterized as regulators of membrane traffic. The Centaurin GTPase-activating protein family comprise a subset of ARF regulatory molecules that transduce PI 3-kinase activation into coordinated control of Arf-dependent pathways. This family includes ASAP1, ACAP1, ACAP2, AGAP1, ARAP1, ARAP2, Centaurin $\alpha 1$ and Centaurin $\gamma 3$. The Centaurin $\alpha 1$ protein is a high affinity PtdIns(3,4,5)P₃ binding protein enriched in brain. By acting as a GTPase activating protein for ADP ribosylation factor 6 (ARF6), Centaurin $\alpha 1$ is able to switch off ARF6 and inhibit its ability to mediate $\beta 2$ -adrenoceptor internalization and negatively regulate ARF6 activity by functioning as an *in vivo* PIP₃ dependent ARF6 GAP.

REFERENCES

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4. Venkateswarlu, K., et al. 2005. Centaurin $\alpha 1$ interacts directly with kinesin motor protein KIF13B. *J. Cell Sci.* 118: 2471-2484.
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6. Lawrence, J., et al. 2005. Centaurin $\alpha 1$, an ADP-ribosylation factor 6 GTPase activating protein, inhibits $\beta 2$ -adrenoceptor internalization. *Mol. Pharmacol.* 67: 1822-1828.
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CHROMOSOMAL LOCATION

Genetic locus: CENTG3 (human) mapping to 7q36.1.

PRODUCT

Centaurin $\gamma 3$ (h): 293T Lysate represents a lysate of human Centaurin $\gamma 3$ transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

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.

RESEARCH USE

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

APPLICATIONS

Centaurin $\gamma 3$ (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Centaurin $\gamma 3$ antibodies. Recommended use: 10-20 μ l per lane.

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

PROTOCOLS

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