



Centaurin γ 3 (m): 293T Lysate: sc-119171

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 α 1 and Centaurin γ 3. The Centaurin α 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 α 1 is able to switch off ARF6 and inhibit its ability to mediate β_2 -adrenoceptor internalization and negatively regulate ARF6 activity by functioning as an *in vivo* PIP₃ dependent ARF6 GAP.

REFERENCES

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2. Thacker, E., et al. 2004. The ARF6 GAP Centaurin α 1 is a neuronal Actin-binding protein which also functions via GAP-independent activity to regulate the Actin cytoskeleton. *Eur. J. Cell Biol.* 83: 541-554.
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5. Kanamarlapudi, V. 2005. Centaurin α 1 and KIF13B kinesin motor protein interaction in ARF6 signalling. *Biochem. Soc. Transact.* 33: 1279-1281.
6. Lawrence, J., et al. 2005. Centaurin α 1, an ADP-ribosylation factor 6 GTPase activating protein, inhibits β_2 -adrenoceptor internalization. *Mol. Pharmacol.* 67: 1822-1828.
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CHROMOSOMAL LOCATION

Genetic locus: Agap3 (mouse) mapping to 5 A3.

PRODUCT

Centaurin γ 3 (m): 293T Lysate represents a lysate of mouse Centaurin γ 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.

APPLICATIONS

Centaurin γ 3 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Centaurin γ 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.

RESEARCH USE

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

PROTOCOLS

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