Centaurin γ3 (H-50): sc-135212



The Power to Question

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, ACAP2, AGAP1, ARAP1, ARAP2, Centaurin $\alpha 1$ and Centaurin $\gamma 3$. The Centaurin $\alpha 1$ protein is a high affinity Ptdlns(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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CHROMOSOMAL LOCATION

Genetic locus: AGAP3 (human) mapping to 7q36.1; Agap3 (mouse) mapping to 5 A3.

SOURCE

Centaurin γ 3 (H-50) is a rabbit polyclonal antibody raised against amino acids 826-875 mapping at the C-terminus of Centaurin γ 3 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Centaurin $\gamma 3$ (H-50) is recommended for detection of Centaurin $\gamma 3$ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg 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); may cross-react with Centaurin $\gamma 1$.

Centaurin $\gamma 3$ (H-50) is also recommended for detection of Centaurin $\gamma 3$ in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Centaurin $\gamma 3$ siRNA (h): sc-60355, Centaurin $\gamma 3$ siRNA (m): sc-60356, Centaurin $\gamma 3$ shRNA Plasmid (h): sc-60355-SH, Centaurin $\gamma 3$ shRNA Plasmid (m): sc-60356-SH, Centaurin $\gamma 3$ shRNA (h) Lentiviral Particles: sc-60355-V and Centaurin $\gamma 3$ shRNA (m) Lentiviral Particles: sc-60356-V.

Molecular Weight of Centaurin γ3 variant 1/2: 95 kDa.

Molecular Weight of Centaurin y3 variant 3: 40 kDa

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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



Try Centaurin γ 3 (E-8): sc-271793 or Centaurin γ 3 (A-10): sc-393553, our highly recommended monoclonal alternatives to Centaurin γ 3 (H-50).

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