

Centaurin γ 3 (E-11): sc-390362

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.

CHROMOSOMAL LOCATION

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

SOURCE

Centaurin γ 3 (E-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 191-227 near the N-terminus of Centaurin γ 3 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390362 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Centaurin γ 3 (E-11) is recommended for detection of Centaurin γ 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Centaurin γ 3 (E-11) is also recommended for detection of Centaurin γ 3 in additional species, including equine, canine and porcine.

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

Molecular Weight of Centaurin γ 3 variant 1: 95 kDa.

Molecular Weight of Centaurin γ 3 variant 2: 95 kDa.

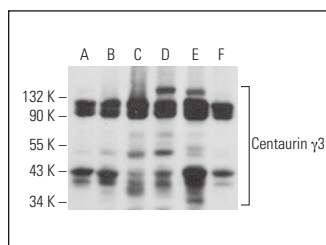
Molecular Weight of Centaurin γ 3 variant 3: 40 kDa.

Positive Controls: mouse brain extract: sc-2253, HeLa whole cell lysate: sc-2200 or T98G cell lysate: sc-2294.

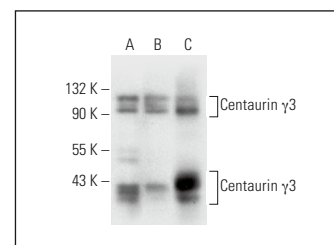
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Centaurin γ 3 (E-11): sc-390362. Western blot analysis of Centaurin γ 3 expression in HeLa (A), U-87 MG (B), Neuro-2A (C), C6 (D), IMR-32 (E) and SK-MEL-24 (F) whole cell lysates.



Centaurin γ 3 (E-11): sc-390362. Western blot analysis of Centaurin γ 3 expression in HeLa (A) and T98G (B) whole cell lysates and mouse brain tissue extract (C).

SELECT PRODUCT CITATIONS

1. AlOlaby, R.R., et al. 2022. Differential methylation profile in fragile X syndrome-prone offspring mice after in utero exposure to *Lactobacillus reuteri*. Genes 13: 1300.

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 for detailed protocols and support products.