

# Centaurin $\beta$ 5 (P-12): sc-160231

## BACKGROUND

ADP-ribosylation factor (ARF) family of small GTP-binding proteins are involved in vesicular transport regulation and controlling cytoskeletal organization and cell adhesion. These proteins are best characterized as regulators of membrane trafficking. 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. Centaurin  $\beta$ 5, also known as ACAP3 (Arf-GAP with coiled-coil, ANK repeat and PH domain-containing protein 3), is an 834 amino acid protein that contains 3 ANK repeats, one Arf-GAP domain and one PH domain. Predominantly expressed in the nervous system, mutations in the gene encoding Centaurin  $\beta$ 5 may be related to epilepsy and neurodegenerative processes. There are three isoforms of Centaurin  $\beta$ 5 that are produced as a result of alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ACAP3 (human) mapping to 1p36.33; Acap3 (mouse) mapping to 4 E2.

## SOURCE

Centaurin  $\beta$ 5 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Centaurin  $\beta$ 5 of human origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160231 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Centaurin  $\beta$ 5 (P-12) is recommended for detection of Centaurin  $\beta$ 5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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  $\beta$ 5 (P-12) is also recommended for detection of Centaurin  $\beta$ 5 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for Centaurin  $\beta$ 5 siRNA (h): sc-88151, Centaurin  $\beta$ 5 siRNA (m): sc-142272, Centaurin  $\beta$ 5 shRNA Plasmid (h): sc-88151-SH, Centaurin  $\beta$ 5 shRNA Plasmid (m): sc-142272-SH, Centaurin  $\beta$ 5 shRNA (h) Lentiviral Particles: sc-88151-V and Centaurin  $\beta$ 5 shRNA (m) Lentiviral Particles: sc-142272-V.

Molecular Weight of Centaurin  $\beta$ 5: 92 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.