# SANTA CRUZ BIOTECHNOLOGY, INC.

# ACAP2 (C-20): sc-48959



## BACKGROUND

The 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 mainly regulate membrane traffic. ACAP2 is a member of the centaurin GTPase-activating protein (GAP) family, which comprises a subset of ARF regulatory molecules that transduce PI 3-kinase activation into coordinated control of ARF-dependent pathways. ACAP1 and ACAP2 are both widely expressed in peripheral, tubular membranes and usually interact with each other in various tissues. GAP activity of both ACAP1 and ACAP2 is dependent upon phosphatidylinositol 4,5-bisphosphate [PtdIns(4,5)P2]. ACAP2 associates with ARF1 and ARF6. Overexpression of ACAP2 blocks the formation of ARF6-dependent protrusions. K1L is a protein required for growth of the Vaccinia Virus that interacts with the ankyrin repeats of ACAP2.

## CHROMOSOMAL LOCATION

Genetic locus: CENTB2 (human) mapping to 3q29; Centb2 (mouse) mapping to 16 B2.

#### SOURCE

ACAP2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ACAP2 of human origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-48959 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **APPLICATIONS**

ACAP2 (C-20) is recommended for detection of ACAP2 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).

ACAP2 (C-20) is also recommended for detection of ACAP2 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for ACAP2 siRNA (h): sc-60121, ACAP2 siRNA (m): sc-60122, ACAP2 shRNA Plasmid (h): sc-60121-SH, ACAP2 shRNA Plasmid (m): sc-60122-SH, ACAP2 shRNA (h) Lentiviral Particles: sc-60121-V and ACAP2 shRNA (m) Lentiviral Particles: sc-60122-V.

Molecular Weight of ACAP2: 88 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, HeLa whole cell lysate: sc-2200 or CCRF-CEM cell lysate: sc-2225.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

#### DATA





ACAP2 (C-20): sc-48959. Western blot analysis of ACAP2 expression in NIH/3T3 (A), HeLa (B) and CCRF-CEM (C) whole cell lysates.

ACAP2 (C-20): sc-48959. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

#### **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.

## MONOS Satisfation Guaranteed

Try ACAP2 (F-8): sc-376150 or ACAP2 (E-9): sc-271355, our highly recommended monoclonal

alternatives to ACAP2 (C-20).