SANTA CRUZ BIOTECHNOLOGY, INC.

GAP1-InsP_4 BP (C-20): sc-17946

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Human GAP1-InsP_4 BP, also designated Ras p21 protein activator (GTPase-activating protein) 3 [Ins(1,3,4,5)P_4-binding protein], is an 829-amino acid protein that binds phospholipids in both a calcium-dependent and -independent manner. GAP1, one of the Ras GTPase-activating protein families, comprises four distinct genes, including GAP1(m), GAP1-InsP_4 BP, MRASAL (murine Ras GTPase-activating-like) and KIAA0538. This family contains an N-terminal tandem C2 domain, a GAP-related domain and a C-terminal pleckstrin homology (PH) domain. The PH domains of GAP1-InsP_4 BP are essential for membrane targeting via binding of specific phospholipids. Following agonist-stimulated PtdIns(3,4,5)P(3) production, group I family PH domain containing proteins like GAP1-InsP_4 BP specifically bind inositol phosphates, which are subsequently targeted to the plasma membrane.

CHROMOSOMAL LOCATION

Genetic locus: RASA3 (human) mapping to 13q34; Rasa3 (mouse) mapping to 8 A1.1.

SOURCE

GAP1-InsP_4 BP (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GAP1-InsP_4 BP of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-17946 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

GAP1-InsP_4 BP (C-20) is recommended for detection of GAP1-InsP_4 BP 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).

GAP1-InsP_4 BP (C-20) is also recommended for detection of GAP1-InsP_4 BP in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for GAP1-InsP_4 BP siRNA (h): sc-39023, GAP1-InsP_4 BP siRNA (m): sc-39024, GAP1-InsP_4 BP shRNA Plasmid (h): sc-39023-SH, GAP1-InsP_4 BP shRNA Plasmid (m): sc-39024-SH, GAP1-InsP_4 BP shRNA (h) Lentiviral Particles: sc-39023-V and GAP1-InsP_4 BP shRNA (m) Lentiviral Particles: sc-39024-V.

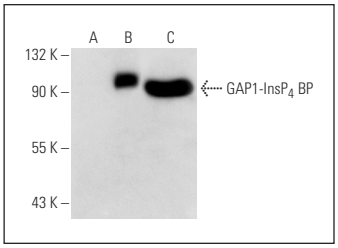
Molecular Weight of GAP1-InsP_4 BP: 97 kDa.

Positive Controls: human platelet extract: sc-363773, GAP1-InsP_4 BP (h): 293T Lysate: sc-115700 or HeLa whole cell lysate: sc-2200.

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



GAP1-InsP_4 BP (C-20): sc-17946. Western blot analysis of GAP1-InsP_4 BP expression in non-transfected: sc-117752 (**A**) and human GAP1-InsP_4 BP transfected : sc-115700 (**B**) 293T whole cell lysates and human platelet extract (**C**).

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 or our catalog for detailed protocols and support products.