SANTA CRUZ BIOTECHNOLOGY, INC.

PRA1 (G-13): sc-162033

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

PRA1 (prenylated Rab acceptor protein 1), alternately known as RABAC1 (Rab acceptor 1) or YIP3, is a 185 amino acid multi-pass membrane protein and Rab regulator required for vesicle formation from the Golgi complex. Existing as a homodimer, PRA1 is ubiquitously expressed and found at high levels in pituitary gland, kidney, placenta, stomach and lung. PRA1 interacts with prenylated Rab proteins, most specifically, Rab 4B, Rab 5A and Rab 5C, along with VAMP-2, Rab GDI α and piccolo. PRA1 weakly interacts with Rab 4A, Rab 6, Rab 7, Rab 17 and Rab 22. PRA1 may regulate the action of Rab GTPases to SNARE complexes, thereby controlling vesicle fusion and docking. The gene encoding PRA1 maps to human chromosome 19q13.2.

REFERENCES

1. Bucci, C., et al. 2001. Expression analysis and chromosomal assignment of PRA1 and RILP genes. Biochem. Biophys. Res. Commun. 286: 815-819.
2. Figueroa, C., et al. 2001. Prenylated Rab acceptor protein is a receptor for prenylated small GTPases. J. Biol. Chem. 276: 28219-28225.

CHROMOSOMAL LOCATION

Genetic locus: RABAC1 (human) mapping to 19q13.2; Rabac1 (mouse) mapping to 7 A3.

SOURCE

PRA1 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of PRA1 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-162033 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRA1 (G-13) is recommended for detection of PRA1 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).

PRA1 (G-13) is also recommended for detection of PRA1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PRA1 siRNA (h): sc-97561, PRA1 siRNA (m): sc-152434, PRA1 shRNA Plasmid (h): sc-97561-SH, PRA1 shRNA Plasmid (m): sc-152434-SH, PRA1 shRNA (h) Lentiviral Particles: sc-97561-V and PRA1 shRNA (m) Lentiviral Particles: sc-152434-V.

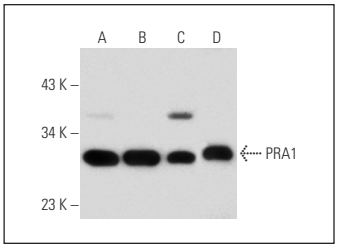
Molecular Weight of PRA1: 21 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, SK-N-MC cell lysate: sc-2237 or SK-MEL-28 cell lysate: sc-2236.

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



PRA1 (G-13): sc-162033. Western blot analysis of PRA1 expression in HeLa (**A**), SK-N-MC (**B**) and SK-MEL-28 (**C**) whole cell lysates and mouse skeletal muscle tissue extract (**D**).

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.