SANTA CRUZ BIOTECHNOLOGY, INC.

POR1 (D-19): sc-9800

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

POR1 (also designated arfaptin 2) was first isolated as a Rac 1 binding protein necessary for Rac mediated Actin polymerization and the subsequent formation of membrane ruffles and lamellipodia. POR1 has also been shown to interact with the ADP ribosylation factor ARF6, a GTPase that associates with the plasma membrane and intracellular endosome vesicles, in a GTP dependent manner. The association of POR1 with ARF6 stimulates induction of Actin polymerization. POR1 appears to play a regulatory role through multiple signaling pathways in the reorganization of the cytoskeletal structure.

REFERENCES

1. Van Aelst, L., Joneson, T. and Bar-Sagi, D. 1996. Identification of a novel Rac 1-interacting protein involved in membrane ruffling. EMBO J. 15: 3778-3786.
2. Joneson, T., McDonough, M., Bar-Sagi, D. and Van Aelst, L. 1996. RAC regulation of Actin polymerization and proliferation by a pathway distinct from Jun kinase. Science 274: 1374-1376.

CHROMOSOMAL LOCATION

Genetic locus: ARFIP2 (human) mapping to 11p15.4; Arfip2 (mouse) mapping to 7 E3.

SOURCE

POR1 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of POR1 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-9800 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

POR1 (D-19) is recommended for detection of POR1 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).

POR1 (D-19) is also recommended for detection of POR1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for POR1 siRNA (h): sc-41192, POR1 siRNA (m): sc-41193, POR1 shRNA Plasmid (h): sc-41192-SH, POR1 shRNA Plasmid (m): sc-41193-SH, POR1 shRNA (h) Lentiviral Particles: sc-41192-V and POR1 shRNA (m) Lentiviral Particles: sc-41193-V.

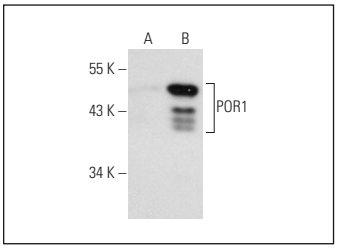
Molecular Weight of POR1: 33 kDa.

Positive Controls: POR1 (h): 293T Lysate: sc-171384, HeLa whole cell lysate: sc-2200 or IMR-32 cell lysate: sc-2409.

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



POR1 (D-19): sc-9800. Western blot analysis of POR1 expression in non-transfected: sc-117752 (**A**) and human POR1 transfected: sc-171384 (**B**) 293T whole cell lysates.

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.