SANTA CRUZ BIOTECHNOLOGY, INC.

Rictor (S-20): sc-50678

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

FRAP is a large protein kinase that is the mammalian target of rapamycin, an immunosuppressant that blocks vessel restenosis and also has potential anti-cancer applications. Rapamycin-insensitive companion of FRAP, also designated Rictor, shares homology with pianissimo from *D. discoidieum,* STE20p from *S. pombe,* and AVO3p from *S. cerevisiae.* Rictor forms a complex with FRAP, which is important in cell growth regulation as it integrates growth factor and nutrient derived signals. The Rictor-FRAP complex plays a role in PKCα phosphorylation, directly phosphorylates Akt/PKB on Ser473 *in vitro* and facilitates Thr308 phosphorylation by PDK1. It also may function as a drug target in tumors that have lost expression of PTEN, a tumor suppressor that opposes activation of Akt/PKB.

CHROMOSOMAL LOCATION

Genetic locus: RICTOR (human) mapping to 5p13.1; Rictor (mouse) mapping to 15 A1.

SOURCE

Rictor (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Rictor of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50678 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Rictor (S-20) is recommended for detection of Rictor 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Rictor (S-20) is also recommended for detection of Rictor in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Rictor siRNA (h): sc-61478, Rictor siRNA (m): sc-61479, Rictor shRNA Plasmid (h): sc-61478-SH, Rictor shRNA Plasmid (m): sc-61479-SH, Rictor shRNA (h) Lentiviral Particles: sc-61478-V and Rictor shRNA (m) Lentiviral Particles: sc-61479-V.

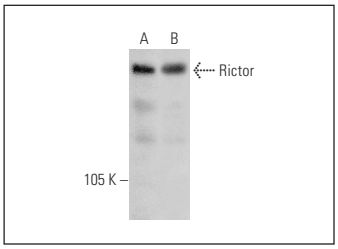
Molecular Weight of Rictor: 200 kDa.

Positive Controls: Ramos cell lysate: sc-2216, HEK293 whole cell lysate: sc-45136 or HeLa whole cell lysate: sc-2200.

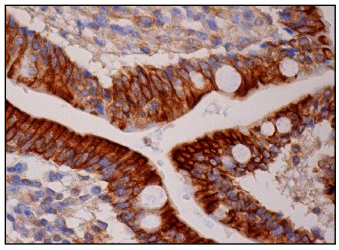
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Rictor (S-20): sc-50678. Western blot analysis of Rictor expression in HeLa (**A**) and HEK293 (**B**) whole cell lysates.



Rictor (S-20): sc-50678. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Zafar, I., et al. 2010. Sirolimus attenuates disease progression in an orthologous mouse model of human autosomal dominant polycystic kidney disease. Kidney Int. 78: 754-761.
2. Boulbés, D.R., et al. 2011. Endoplasmic reticulum is a main localization site of mTORC2. Biochem. Biophys. Res. Commun. 413: 46-52.
3. Sarbassov, dos D., et al. 2012. Isolation of the mTOR complexes by affinity purification. Methods Mol. Biol. 821: 59-74.

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.