

# Rictor (H-278): sc-99004

## BACKGROUND

FRAP is a large protein kinase that is the mammalian target of Rapamycin, an immunosuppressant that blocks vessel restenosis and also has potential anticancer applications. Rapamycin-insensitive companion of FRAP, also designated Rictor, shares homology with pianissimo from *D. discoideum*, 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 PKC $\alpha$  phosphorylation, directly phosphorylates Akt/PKB on Ser 473 *in vitro* and facilitates Thr 308 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.

## REFERENCES

1. Ohara, O., et al. 2002. Characterization of size-fractionated cDNA libraries generated by the *in vitro* recombination-assisted method. *DNA Res.* 9: 47-57.
2. Beausoleil, S.A., et al. 2004. Large-scale characterization of HeLa cell nuclear phosphoproteins. *Proc. Natl. Acad. Sci. USA* 101: 12130-12135.

## CHROMOSOMAL LOCATION

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

## SOURCE

Rictor (H-278) is a rabbit polyclonal antibody raised against amino acids 20-297 mapping near the N-terminus of Rictor of human origin.

## PRODUCT

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

## APPLICATIONS

Rictor (H-278) 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  $\mu$ g per 100-500  $\mu$ g 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 (H-278) is also recommended for detection of Rictor in additional species, including 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.

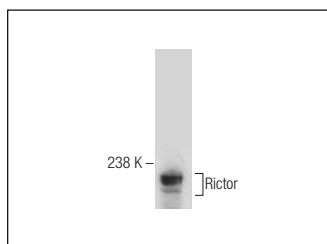
Molecular Weight of Rictor: 200 kDa.

Positive Controls: Ramos cell lysate: sc-2216, SK-BR-3 cell lysate: sc-2218 or HeLa whole cell lysate: sc-2200.

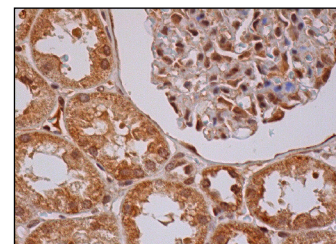
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



Rictor (H-278): sc-99004. Western blot analysis of Rictor expression in Ramos whole cell lysate.



Rictor (H-278): sc-99004. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic and nuclear staining of cells in glomeruli and cells in tubules.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **Rictor (H-11): sc-271081** or **Rictor (1G11): sc-81538**, our highly recommended monoclonal alternatives to Rictor (H-278). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Rictor (H-11): sc-271081**.