

Rictor (V-23): sc-130865

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 α 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

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- Beausoleil, S.A., et al. 2004. Large-scale characterization of HeLa cell nuclear phosphoproteins. *Proc. Natl. Acad. Sci. USA* 101: 12130-12135.
- Jacinto, E., et al. 2004. Mammalian TOR complex 2 controls the actin cytoskeleton and is rapamycin insensitive. *Nat. Cell Biol.* 6: 1122-1128.
- Sarbassov, D.D., et al. 2004. Rictor, a novel binding partner of FRAP, defines a rapamycin-insensitive and raptor-independent pathway that regulates the cytoskeleton. *Curr. Biol.* 14: 1296-1302.
- Ali, S.M., et al. 2005. Structure of S6 kinase 1 determines whether raptor-mTOR or rictor-mTOR phosphorylates its hydrophobic motif site. *J. Biol. Chem.* 280: 19445-19448.
- Hresko, R.C., et al. 2005. mTOR.RICTOR is the Ser 473 kinase for Akt/protein kinase B in 3T3-L1 adipocytes. *J. Biol. Chem.* 280: 40406-40416.

CHROMOSOMAL LOCATION

Genetic locus: RICTOR (human) mapping to 5p13.1.

SOURCE

Rictor (V-23) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of Rictor of human origin.

PRODUCT

Each vial contains 100 μ g of IgG in PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

Rictor (V-23) is recommended for detection of Rictor of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

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

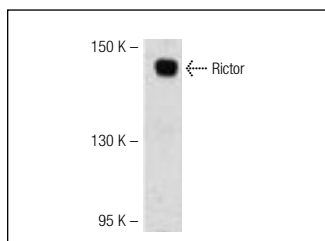
Molecular Weight of Rictor: 200 kDa.

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

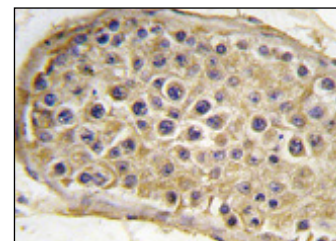
RECOMMENDED SECONDARY REAGENTS

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 (V-23): sc-130865. Western blot analysis of Rictor expression in SK-BR-3 whole cell lysate.



Rictor (V-23): sc-130865. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human testis tissue showing cytoplasmic localization.

RESEARCH USE

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



Try **Rictor (H-11): sc-271081** or **Rictor (1G11): sc-81538**, our highly recommended monoclonal alternatives to Rictor (V-23). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Rictor (H-11): sc-271081**.