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Store at -20C
#2114

Rictor (53A2) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, W-S	H M R Mk	Endogenous	200	Rabbit IgG	#Q6R327	253260

Product Usage Information

Application

Western Blotting
Simple Western™

Dilution

1:1000
1:10 - 1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Rictor (53A2) Rabbit mAb detects endogenous levels of total Rictor protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gln1681 of human Rictor protein.

Background

Cell growth is a fundamental biological process whereby cells accumulate mass and increase in size. The mammalian TOR (mTOR) pathway regulates growth by coordinating energy and nutrient signals with growth factor-derived signals (1). mTOR is a large protein kinase with two different complexes. One complex contains mTOR, GβL and raptor, which is a target of rapamycin. The other complex, insensitive to rapamycin, includes mTOR, GβL, Sin1, and rictor (1). The mTOR-rictor complex phosphorylates Ser473 of Akt/PKB *in vitro* (2). This phosphorylation is essential for full Akt/PKB activation. Furthermore, an siRNA knockdown of rictor inhibits Ser473 phosphorylation in 3T3-L1 adipocytes (3). This complex has also been shown to phosphorylate the rapamycin-resistant mutants of S6K1, another effector of mTOR (4).

Background References

1. Sarbassov, D.D. et al. (2004) *Curr. Biol.* 14, 1296-1302.
2. Sarbassov, D.D. et al. (2005) *Science* 307, 1098-1101.
3. Hresko, R.C. and Mueckler, M. (2005) *J. Biol. Chem.* 280, 40406-40416.
4. Ali, S.M. and Sabatini, D.M. (2005) *J. Biol. Chem.* 280, 19445-19448.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **W-S:** Simple Western™

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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