

Rictor (Phospho-Thr1135) polyclonal antibody

Catalog: BCP01436

Host: Rabbit

Reactivity: Human

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. 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. The mTOR-rictor complex phosphorylates Ser473 of Akt/PKB in vitro. This phosphorylation is essential for full Akt/PKB activation. Furthermore, an siRNA knockdown of rictor inhibits Ser473 phosphorylation in 3T3-L1 adipocytes. This complex has also been shown to phosphorylate the rapamycin-resistant mutants of S6K1, another effector of mTOR.

Phosphorylation of Thr1135 on rictor was identified at Cell Signaling Technology (CST) using PhosphoScan®, CST's LC-MS/MS platform for phosphorylation site discovery. Additional research indicates that rictor is phosphorylated at Thr1135 by p70 S6K, which negatively regulates mTORC2 protein complex as part of a negative feedback mechanism controlling Akt activity.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

~ 210 kDa

Swiss-Prot:

Q6R327

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:500~1:1000

IHC: 1:50~1:200

IF: 1:50~1:200

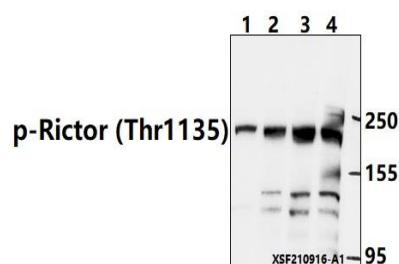
Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

Specificity:

Rictor (Phospho-Thr1135) polyclonal antibody detects endogenous levels of Rictor protein only when phosphorylated at Thr1135.

DATA:



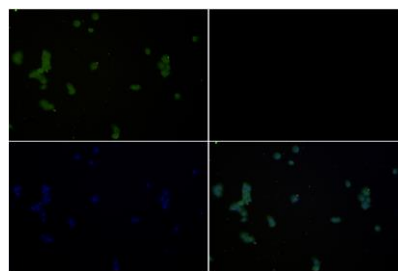
Western blot (WB) analysis of Rictor (Phospho-Thr1135) polyclonal antibody at 1:500 dilution

Lane1:HeLa treated with λ-phosphatase whole cell lysate(40ug)

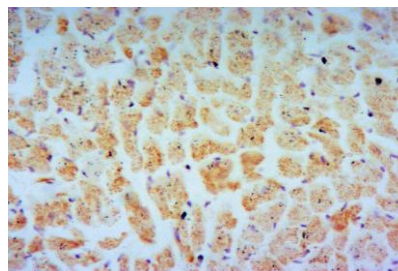
Lane2:HeLa treated with IGF-1(50 ng/ml,30 minutes) whole cell lysate(40ug)

Lane3:HeLa treated with IGF-1(50 ng/ml,15 minutes) whole cell lysate(40ug)

Lane4:HeLa whole cell lysate(40ug)



Immunofluorescence analysis of HeLa cells using Rictor antibody at dilution of 1:50.



Immunohistochemistry of paraffin-embedded Rat Heart using Rictor (Phospho-Thr1135) antibody at dilution of 1:50.

Note:

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