

AKT polyclonal antibody

Catalog: BCP00195

Host: Rabbit

Reactivity: Human, Mouse, Rat

BackGround:

The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 (also designated PKB β or RacPK- β) and Akt 3 (also designated PKB γ or thymoma viral proto-oncogene 3), which exhibit sequence homology with the protein kinase A and C families and are encoded by the c-Akt proto-oncogene. All members of the Akt family have a pleckstrin homology domain. Akt1 and Akt2 are activated by PDGF stimulation. This activation is dependent on PDGFR- β tyrosine residues 740 and 751, which bind the subunit of the phosphatidylinositol 3-kinase (PI 3-kinase) complex. Activation of Akt1 by insulin or insulin-growth factor-1(IGF-1) results in phosphorylation of both Thr 308 and Ser 473. Phosphorylation of both residues is important to generate a high level of Akt1 activity, and the phosphorylation of Thr 308 is not dependent on phosphorylation of Ser 473 in vivo. Thus, Akt proteins become phosphorylated and activated in insulin/IGF-1-stimulated cells by an upstream kinase(s). The activation of Akt1 and Akt2 is inhibited by the PI kinase inhibitor wortmannin, suggesting that the protein signals downstream of the PI kinases.

Product:

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

Molecular Weight:

56 kDa

Swiss-Prot:

P31749(Human) P31751(Human) Q9Y243(Human)
P31750(Mouse) Q60823(Mouse) Q9WUA6(Mouse)
P47196(Rat) P47197(Rat) Q63484(Rat)

Purification&Purity:

ProA affinity purified

Applications:

WB:1:1,000-1:5,000

ICC:1:50-1:200

IHC:1:50-1:200

FC:1:50-1:100

Storage&Stability:

Store at +4 °C after thawing. Aliquot store at -20 °C or -80 °C. Avoid repeated freeze / thaw cycles.

Specificity:

AKT polyclonal antibody detects endogenous levels of AKT protein.

DATA:

Western blot analysis of AKT1/2/3 on MCF-7 cell lysates using anti-AKT1/2/3 antibody at 1/1,000 dilution.

ICC staining AKT1/2/3 in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Note:

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