

Phospho-AKT1 (Tyr474) Polyclonal Antibody

CATALOG NO:	A1036-100
ALTERNATIVE NAMES:	PKB, c-Akt, RAC
AMOUNT:	100 µg (1 mg/ml)
HOST/ISOTYPE:	Rabbit IgG
IMMUNOGEN:	Synthetic peptide
SPECIES REACTIVITY:	Human
PURIFICATION:	Affinity purified rabbit IgG using protein G
FORM:	Liquid
FORMULATION:	Supplied in 0.01M Tris-HCl, pH 8.0, 0.15M NaCl, and 0.02% sodium azide. Protein was determined by OD280 absorbance.
STORAGE CONDITIONS:	Store at 4°C. For long term storage, aliquot and freeze at -20°C. Avoid repeated freeze/thaw cycles.
DESCRIPTION:	The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 and Akt 3, which exhibit sequence homology with the protein kinase A and C families and are encoded by the c-Akt proto-oncogene. They 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..
APPLICATION:	Western blot, Immunoblot: 0.5-2 µg/ml, ELISA

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.

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