

## Phospho-AKT1 (Ser473) Polyclonal Antibody

<b>CATALOG NO:</b>	A1041-100
<b>ALTERNATIVE NAMES:</b>	PKB, c-Akt, RAC
<b>AMOUNT:</b>	100 µg (1 mg/ml)
<b>HOST/ISOTYPE:</b>	Rabbit IgG
<b>IMMUNOGEN:</b>	Synthetic peptide
<b>SPECIES REACTIVITY:</b>	Human
<b>PURIFICATION:</b>	Affinity purified rabbit IgG using protein G
<b>FORM:</b>	Liquid
<b>FORMULATION:</b>	Supplied in 0.01M Tris-HCl, pH 8.0, 0.15M NaCl, and 0.02% sodium azide. Protein was determined by OD280 absorbance.
<b>STORAGE CONDITIONS:</b>	Store at 4°C. For long term storage, aliquot and freeze at -20°C. Avoid repeated freeze/thaw cycles.
<b>DESCRIPTION:</b>	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- $\beta$ 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.
<b>APPLICATION:</b>	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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- Apoptosis siRNA Vectors

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- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

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- Bioluminescence Cytotoxicity Assay Kit
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