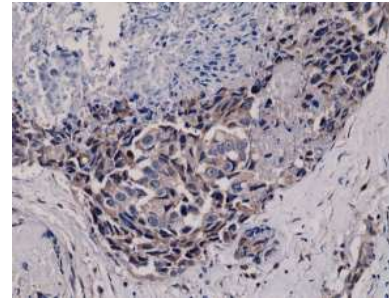


Anti-phospho-Akt (Ser473) Rabbit Monoclonal Antibody

CATALOG NO:	A1119-50
ALTERNATIVE NAMES:	PKB, RAC, Protein kinase B, Protein kinase B alpha, Short PKB alpha, Proto-oncogene c-Akt, RAC-PK-alpha, RAC-alpha serine/threonine-protein kinase
AMOUNT:	50 µl
CLONE:	RM251
IMMUNOGEN:	A phospho-peptide corresponding to human Phospho-Akt (Ser473)
MOLECULAR WEIGHT:	56 kDa
HOST/ISOTYPE:	Rabbit IgG
SPECIES REACTIVITY:	Human
PURIFICATION:	Protein A affinity purified from an animal origin-free culture supernatant
FORM:	Liquid
FORMULATION:	50% Glycerol/PBS with 1% BSA and 0.09% sodium azide
STORAGE CONDITIONS:	For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

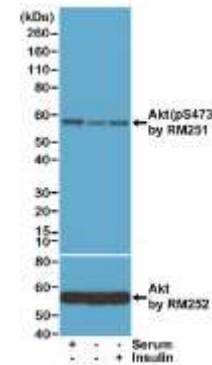
DESCRIPTION: The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 and Akt 3, which exhibit sequence homology with the protein kinase A and C families and are encoded by the c-Akt proto-oncogene. They have a pleckstrin homology domain. Akt1 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: IHC: 1:200-1:500 dilution; dilution; WB: 1:1000-1:2000 dilution
Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.



Immunohistochemical staining of formalin fixed and paraffin embedded human breast cancer tissue sections using Anti-Phospho-Akt (Ser473) antibody at a 1:400 dilution.

SPECIFICITY: This antibody reacts to Akt only when phosphorylated at Ser473. There is no cross-reactivity with Akt without phosphorylation at Ser473. This antibody may also react to bovine, mouse or rat Phospho-Akt (Ser473), as predicted by immunogen homology.



Western Blot of lysates from 293 cells either, grown in medium with serum, serum starved, or insulin treated. Using Anti-Phospho-Akt (Ser473) RM251 at a 1:1000 dilution or anti-Akt1 antibody at a 1:1000 dilution.

RELATED PRODUCTS

- AKT/PKB Antibody (Cat. No. 3247-100)
- AKT2 Antibody (Cat. No. 3155-100)
- AKT3 Antibody (Cat. No. 3159-100)
- AKT3 Antibody (Cat. No. 3162-100)
- AKT3 Antibody (Cat. No. 3163-100)
- AKT3 Antibody (Cat. No. 3164-100)
- Phospho-AKT Antibody (Cat. No. 3257-100)

FOR RESEARCH USE ONLY! Not to be used on humans.