

Phospho-AKT1 (T450) Rabbit mAb

Catalog No: #13410

Package Size: #13410-1 50ul #13410-2 100ul

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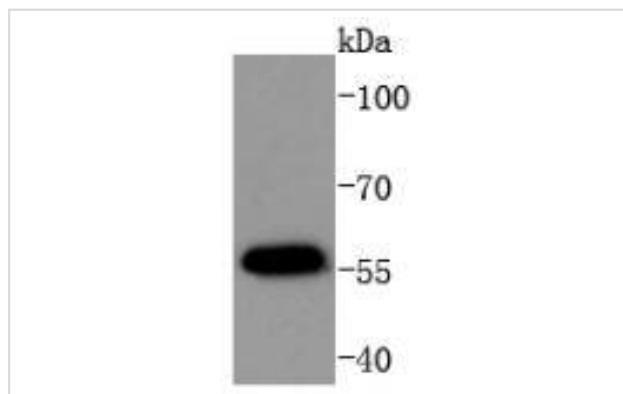
Description

| | |
|-----------------------|---|
| Product Name | Phospho-AKT1 (T450) Rabbit mAb |
| Host Species | Rabbit |
| Clonality | Monoclonal |
| Clone No. | SD08-12 |
| Purification | ProA affinity purified |
| Applications | WB, IHC, IP |
| Species Reactivity | Hu, Ms, Rt |
| Immunogen Description | Synthetic phospho-peptide corresponding to residues surrounding Thr450 of human AKT1. |
| Other Names | AKT 1 antibody AKT antibody AKT1 antibody AKT1_HUMAN antibody MGC99656 antibody PKB antibody PKB-ALPHA antibody PRKBA antibody Protein Kinase B Alpha antibody Protein kinase B antibody Proto-oncogene c-Akt antibody RAC Alpha antibody RAC antibody RAC-alpha serine/threonine-protein kinase antibody RAC-PK-alpha antibody |
| Accession No. | Swiss-Prot#:P31749 |
| Uniprot | P31749 |
| GeneID | 207; |
| Calculated MW | 56 kDa |
| Formulation | 1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide. |
| Storage | Store at -20°C |

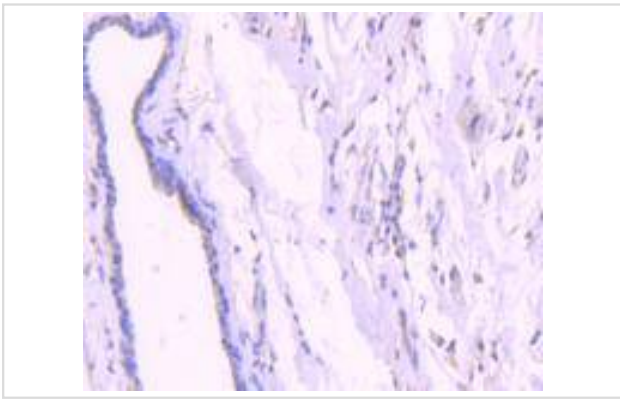
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:100

Images



Western blot analysis of Phospho-AKT1(T450) on MCF-7 cells lysates using anti-Phospho-AKT1(T450) antibody at 1/1,000 dilution.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-Phospho-AKT1(T450) antibody. Counter stained with hematoxylin.

Background

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. 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.

References

Note: This product is for in vitro research use only