

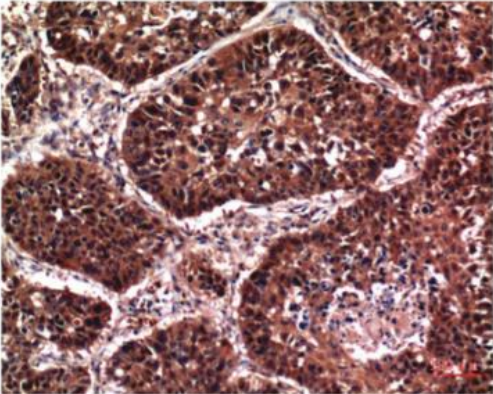
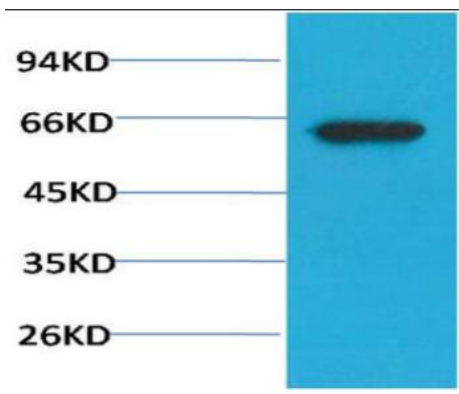
Phospho-Akt (S473) mouse Monoclonal Antibody(7F9)

Cat# A21548PI- 20/50/100 ug

Storage at -20 °C

INFORMATION

Product Name	Phospho-Akt (S473) mouse Monoclonal Antibody(7F9)
Cat. No.	A21548PI
Product type	Primary antibodies
Species reactivity	Human
Clonality	monoclonal
Host	Mouse
Size	20 ug/50 ug/100 ug
Uniprot	Human: P31749/Mouse: P31750
Gene name	AKT1
Protein name	AKT1
Immunogen	Synthetic Peptide of Phospho-Akt (S473) at AA range of 410-490
Specificity	Phospho-Akt (S473) protein detects endogenous levels of AKT1
Concentration	1 mg/ml
Tested applications	WB, IHC-p
Application	WB : 1:1000-1:2000/IHC-p : 1:100-1:200
Conjugation	None
Purification	Affinity purified
Molecular Weight	60 kDa
Stock buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide
Storage instruction	Store at -20°C or -80°C for 1 year. Avoid repeated freeze/thaw cycles.
Cell pathway	Akt_PKB, MAPK_ERK_Growth, MAPK_G_Protein, ErbB_HER, Chemokine, mTOR, Apoptosis_Inhibition, Apoptosis_Mitochondrial, Apoptosis_Overview, VEGF, Focal adhesion, Tight junction, Toll_Like, Jak_STAT, T_Cell_Receptor, B_C
Background	AKT serine/threonine kinase 1(AKT1) Homo sapiens The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serumstarved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can

	<p>suppress apoptosis in a transcriptionindependent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. Mutations in this gene have been associated with the Proteus syndrome. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2011]</p>
Function	<p>catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Defects in AKT1 are associated with breast cancer (BC) [MIM:114480]. BC is an extremely common malignancy, affecting one in eight women during their lifetime.,disease:Defects in AKT1 are associated with colorectal cancer (CRC) [MIM:114500].,disease:Defects in AKT1 are associated with susceptibility to ovarian cancer [MIM:604370]; also called susceptibility to familial breast-ovarian cancer type 1 (BROVCA1).,domain:Binding of the PH domain to the phosphatidylinositol 3-kinase alpha (PI(3)K) results in its targeting to the plasma membrane.,domain:The AGC-kinase C-terminal mediates interaction with THEM4.,enzyme regulation:Three specific sites, one in the kinase domain (Thr-308) and the two other ones in the C-terminal regulatory region (Ser-473 and Tyr-474), need to be phosphorylated for its full activation.,function:Gene</p>
Subcellular location	nucleus, nucleoplasm, cytoplasm, mitochondrion, spindle, cytosol, plasma membrane, cell-cell junction, microtubule cytoskeleton, vesicle, ciliary basal body, protein complex, postsynapse
Expression	Epithelium, Eye, Foreskin, Muscle, Ovary, Placenta
Image	<div style="display: flex; align-items: center;">  <div style="margin-left: 20px;">  <p>94KD 66KD 45KD 35KD 26KD</p> </div> </div> <ul style="list-style-type: none"> ♦ Immunohistochemical analysis of paraffin-embedded Human Lung Carcinoma Tissue using Phospho-Akt Ser473 Mouse mAb diluted at 1:200. (left) ♦ Western blot analysis of PC3 Cell Lysate using Phospho-Akt Ser473 Mouse mAb diluted at 1:1000. (right)

PRODUCT USE LIMITATION

These products are intended for research use only.