

## Akt(Phospho-Ser473) Antibody

Catalog No: #11054



Package Size: #11054-1 50ul #11054-2 100ul

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## Description

Product Name	Akt(Phospho-Ser473) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC IF
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of Akt only when phosphorylated at serine 473.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 473 (Q-F-S(p)-Y-S) derived from Human Akt.
Conjugates	Unconjugated
Target Name	Akt
Modification	Phospho
Other Names	C-AKT; PKB; PKB-alpha; RAC; RAC-PK-alpha; akt s473; akt 473; akt ser473 antibody
Accession No.	Swiss-Prot: P31749NCBI Protein: NP_001014431.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

## Application Details

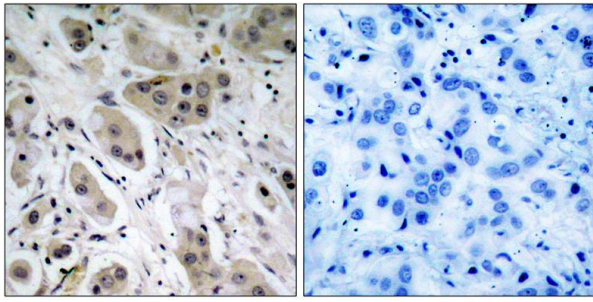
Predicted MW: 60kd

Western blotting: 1:500~1:1000

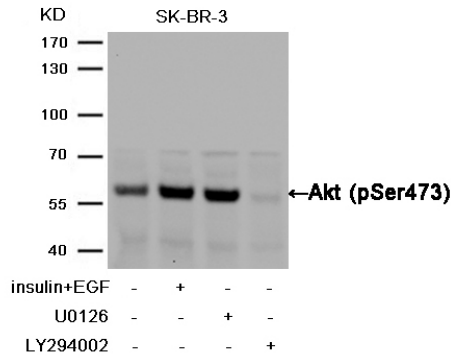
Immunohistochemistry: 1:50~1:100

IF dilution: 1:100-1:200

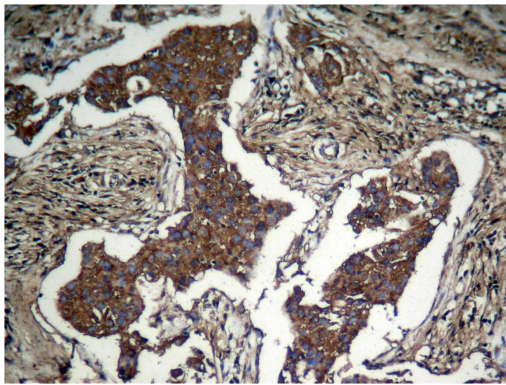
## Images



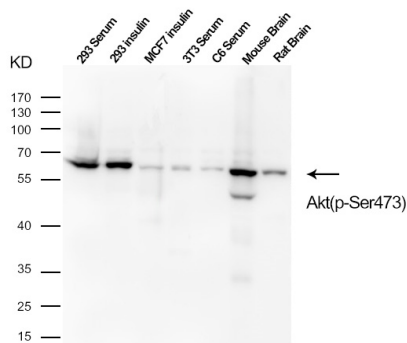
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Akt(Phospho-Ser473) Antibody #11054(left) or the same antibody preincubated with blocking peptide(right).



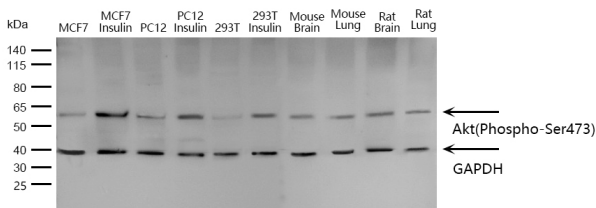
Western blot analysis of extracts from SK-BR-3 cells, treated with insulin and EGF, and pretreated with U0126 and LY294002 cells using Akt (Phospho-Ser473) Antibody #11054.



Immunohistochemical analysis of paraffin-embedded human Lung carcinoma tissue using Akt (Phospho-Ser473) Antibody #11054.



Western blot analysis of extracts of various cell lines, using Akt(Phospho-Ser473) #11054



Western blot analysis of various lysates using Akt(Phospho-Ser473) Antibody at 1:500 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (L3012) at 1:10000 dilution. Lysates/proteins: 25 µg per lane.

## Background

General protein kinase capable of phosphorylating several known proteins. Phosphorylates TBC1D4. Signals downstream of phosphatidylinositol 3-kinase (PI3K) to mediate the effects of various growth factors such as platelet-derived growth factor (PDGF), epidermal growth factor (EGF), insulin and insulin-like growth factor I (IGF-I). Plays a role in glucose transport by mediating insulin-induced translocation of the GLUT4 glucose transporter to the cell surface. Mediates the antiapoptotic effects of IGF-I. Mediates insulin-stimulated protein synthesis by phosphorylating TSC2 at 'Ser-939' and 'Thr-1462', thereby activating mTORC1 signaling and leading to both phosphorylation of 4E-BP1 and in activation of RPS6KB1. Promotes glycogen synthesis by mediating the insulin-induced activation of glycogen synthase.

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