

### 35-1053: Polyclonal Antibody to Akt (Phospho-Ser473)

<b>Clonality :</b>	Polyclonal
<b>Application :</b>	IHC,WB
<b>Reactivity :</b>	Rat,Mouse,Human
<b>Gene :</b>	AKT1
<b>Gene ID :</b>	207
<b>Uniprot ID :</b>	P31749
<b>Format :</b>	Purified
<b>Alternative Name :</b>	C-AKT, PKB, PKB-alpha, RAC, RAC-PK-alpha,akt s473,akt 473,akt ser473 antibody
<b>Isotype :</b>	Rabbit IgG
<b>Immunogen Information :</b>	Peptide sequence around phosphorylation site of serine 473 (Q-F-S(p)-Y-S) derived from Human Akt.

#### Description

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. Baudhuin LM, et al. (2004) FASEB J Feb; 18(2): 341-3. Min YH, et al. (2004) Cancer Res; 64(15): 5225-31. Feng J, et al. (2004) J Biol Chem; 279(34): 35510-7.

#### Product Info

<b>Amount :</b>	50 µl / 100 µl
<b>Content :</b>	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.
<b>Storage condition :</b>	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

#### Application Note

Predicted MW: 60kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100

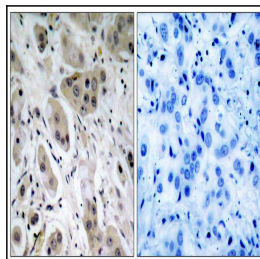


Figure 1: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Akt(Phospho-Ser473) Antibody 35-1053 (left) or the same antibody preincubated with blocking peptide(right).

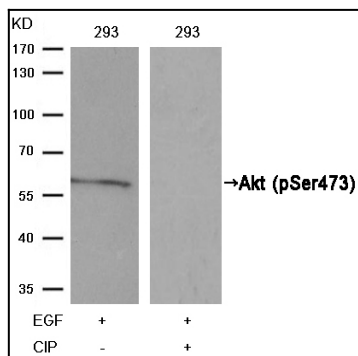


Figure 2: Western blot analysis of extracts from 293 cells, treated with EGF or calf intestinal phosphatase (CIP), using Akt(Phospho-Ser473) Antibody 35-1053 .

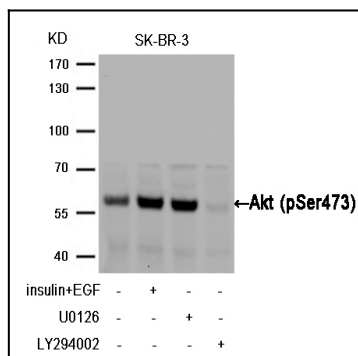


Figure 3: Western blot analysis of extracts from SK-BR-3 cells, treated with insulin and EGF, and pretreated with U0126 and LY294002 cells using Akt (Phospho-Ser473) Antibody 35-1053 .

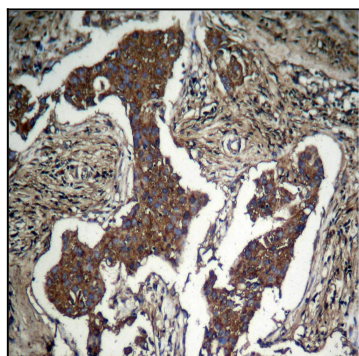


Figure 4: Immunohistochemical analysis of paraffin-embedded human Lung carcinoma tissue using Akt (Phospho-Ser473) Antibody 35-1053 .