Rabbit Anti-AKT1 Polyclonal Antibody

CPB-625RH Rabbit(AKT1)
Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview	Rabbit Anti-AKT1 Polyclonal Antibody
Antigen Description	General protein kinase capable of phosphorylating several known proteins. Phosphorylates TBC1 D4. Signals downstream of phosphatidylinositol 3-kinase (P13K) 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.
specificity	The antibody detects endogenous level of AKT1 only when phosphorylated at serine 473.
Target	AKT1
Immunogen	Peptide sequence around phosphorylation site of serine 473 (Q-F-S(p)-Y-S) derived from Human AKT1.
Host	Rabbit
Species	Human
Cross Reactivity	Human; Mouse; Rat
conjugation	N/A
Applications	WB,IHC

PACKAGING

Format	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C /1 year

ANTIGEN GENE INFORMATION

Gene Name	AKT1 v-akt murine thymoma viral oncogene homolog 1 [Homo sapiens]
Official Symbol	AKT1
Synonyms	AKT1; v-akt murine thymoma viral oncogene homolog 1; RAC-alpha serine/threonine-protein kinase; AKT; PKB; PRKBA; RAC; PKB alpha; RAC-PK-alpha; proto-oncogene c-Akt; protein kinase B alpha; rac protein kinase alpha; PKB-ALPHA; RAC-ALPHA; MGC99656;
GeneID	207
mRNA Refseq	NM_001014431
Protein Refseq	NP_001014431
MIM	164730

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UniProt ID	P31749
Chromosome Location	14q32.32-q32.33
Pathway	AKT phosphorylates targets in the cytosol, organism-specific biosystem; AKT phosphorylates targets in the nucleus, organism-specific biosystem; AKT-mediated inactivation of FOXO1A, organism-specific biosystem; Activation of BAD and translocation to mitochondria, organism-specific biosystem; Activation of BH3-only proteins, organism-specific biosystem; Acute myeloid leukemia, organism-specific biosystem; Acute myeloid leukemia, conserved biosystem;
Function	ATP binding; ATP binding; enzyme binding; identical protein binding; kinase activity; nitric-oxide synthase regulator activity; nucleotide binding; phosphatidylinositol-3,4,5-trisphosphate binding; phosphatidylinositol-3,4-bisphosphate binding; protein binding; protein kinase activity; protein serine/threonine kinase activity; protein serine/threonine kinase activity;

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