Recombinant Human V-Akt Murine Thymoma Viral Oncogene Homolog 2, His-tagged

Cat. No. AKT2-985H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human AKT2 (142-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal His tag.
Species	Human
Source	Sf9 Cells
ProteinLength	142-end a.a.
Description	AKT2 or Protein Kinase B β (PKBβ) is a serine/threonine kinase that is a member of the AKT family. AKT2 like the other AKT members is activated in cells in response to diverse stimuli such as hormones, growth factors and extracellular matrix components and is involved in glucose metabolism, transcription, survival, cell proliferation, angiogenesis, and cell motility. The PI3K generates phosphatidylinositol-3, 4, 5-trisphosphate (PIP3), a lipid second messenger essential for the translocation of AKT2 to the plasma membrane where it is phosphorylated and activated by phosphoinositide-dependent kinase-1 (PDK-1).
Applications	Kinase Assay; Western Blot
Molecular Weight	41 kDa
Expression System	Sf9 insect cells using baculovirus

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Form	Recombinant protein stored in 50 mM sodium phosphate, pH 7.5, 300 mM NaCl, 150 mM imidazole, 0.2 mM DTT, 0.1 mM PMSF, 25 % glycerol.
Purity	> 90 %
Concentration	0.2 ug/ul
Sequences	142-end
Storage	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Pathways	AKT phosphorylates targets in the cytosol; AKT phosphorylates targets in the nucleus; Activation of PKB; Acute myeloid leukemia; Adaptive Immunity Signaling; Adipocytokine signaling pathway; Apoptosis; B cell receptor signaling pathway; Chemokine signaling pathway; Chronic myeloid leukemia; Colorectal cancer; Endometrial cancer; ErbB signaling pathway; Fc epsilon RI signaling pathway; Insulin signaling pathway

GENE INFORMATION

Gene Name	AKT2 v-akt murine thymoma viral oncogene homolog 2 [Homo sapiens]
Official Symbol	AKT2
Synonyms	AKT2; v-akt murine thymoma viral oncogene homolog 2; PKBB; PRKBB; PKBBETA; RAC-BETA; RAC-beta serine/threonine-protein kinase; PKB beta; RAC-PK-beta; protein kinase Akt-2; protein kinase B beta; rac protein kinase beta; murine thymoma viral (v-akt) homolog-2; EC 2.7.11.1; OTTHUMP00000174417

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Gene ID	208
mRNA Refseq	NM_001626
Protein Refseq	NP_001617
MIM	164731
UniProt ID	P31751
Chromosome Location	19q13.1-q13.2
Function	ATP binding; kinase activity; nucleotide binding; protein binding; protein kinase C binding; protein serine/threonine kinase activity
Protein AKT2 PDB 1gzk.	

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