

Recombinant Human AKT1 protein, GST-tagged

Cat. No. AKT1-50H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human AKT1, inactive, fused with GST tag at N-terminal was expressed in Insect cells.
Species	Human
Source	Insect Cells
Description	AKT1/PKB α is a serine/threonine kinase that belongs to the AKT family. AKT1 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. AKT1 is frequently overexpressed and active in many types of human cancers including cancers of colon, breast, brain, pancreas and prostate as well as lymphomas and leukemias.
Form	50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, 25% glycerol.
Molecular Mass	~85 kDa
Purity	>90%
Applications	Kinase Assay, Western Blot
Stability	1yr at -70 centigrade from date of shipment

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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Storage	Store product at –70 centigrade. 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.
Concentration	0.2µg/µl
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;
Gene ID	207
mRNA Refseq	NM_005163
Protein Refseq	NP_005154
MIM	164730
UniProt ID	P31749
Chromosome Location	14q32.32-q32.33
Pathway	AKT phosphorylates targets in the cytosol, organism-specific biosystem; AKT

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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;