Recombinant Human AKT1 protein, His-tagged

Cat. No. AKT1-47H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human AKT1(1-480aa) fused with His tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	1-480 a.a.
Description	AKT1 serine-threonine protein kinase is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival.
Form	Liquid. In 20mM Tris-HCl (pH8.0) containing 10% glycerol
Molecular Mass	58.1kDa (503aa)
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSMSDVAIV KEGWLHKRGE YIKTWRPRYF LLKNDGTFIG YKERPQDVDQ REAPLNNFSV AQCQLMKTERPRPNTFIIRC LQWTTVIERT FHVETPEERE EWTTAIQTVA DGLKKQEEEE MDFRSGSPSD NSGAEEMEVS LAKPKHRVTM NEFEYLKLLGKGTFGKVILV KEKATGRYYA MKILKKEVIV AKDEVAHTLT ENRVLQNSRH PFLTALKYSF QTHDRLCFVM

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	EYANGGELFF HLSRERVFSEDRARFYGAEI VSALDYLHSE KNVVYRDLKL ENLMLDKDGH IKITDFGLCK EGIKDGATMK TFCGTPEYLA PEVLEDNDYG RAVDWWGLGVVMYEMMCGRL PFYNQDHEKL FELILMEEIR FPRTLGPEAK SLLSGLLKKD PKQRLGGGSE DAKEIMQHRF FAGIVWQHVY EKKLSPPFKPQVTSETDTRY FDEEFTAQMI TITPPDQDDS MECVDSERRP HFPQFSYSAS GTA
Purity	> 85% by SDS - PAGE
Storage	Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.
Concentration	0.5mg/ml (determined by Bradford assay)

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_001014432
Protein Refseq	NP_001014432

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MIM	164730
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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