AKT1, 1-480aa, Human, His tag, Insect cell

Cat.NO.: TP01116

3th Edition

Synonyms:RAC-alpha serine/threonine-protein kinase , AKT, CWS6, PKB, PKB-ALPHA, PRKBA, RAC, RAC-ALPHA

Description:AKT1, also known as RAC-alpha 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. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. Recombinant human AKT1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Form: Liquid. In phosphate buffered saline (pH7.4), 20% glycerol.

Molecular Weight:56.7kDa (488aa) 50-70KDa (SDS-PAGE under reducing conditions.)

Sequences:
MSDVAIVKEGWLHKRGEYIKTWRPRYFLLKNDGTFIGYKERPQDVDQREAPLNNFSVAQCQLMKTERPRPNTFIIR
CLQWTTVIERTFHVETPEEREEWTTAIQTVADGLKKQEEEEMDFRSGSPSDNSGAEEMEVSLAKPKHRVTMNEFE
YLKLLGKGTFGKVILVKEKATGRYYAMKILKKEVIVAKDEVAHTLTENRVLQNSRHPFLTALKYSFQTHDRLCFVMEY
ANGGELFFHLSRERVFSEDRARFYGAEIVSALDYLHSEKNVVYRDLKLENLMLDKDGHIKITDFGLCKEGIKDGATM
KTFCGTPEYLAPEVLEDNDYGRAVDWWGLGVVMYEMMCGRLPFYNQDHEKLFELILMEEIRFPRTLGPEAKSLLS
GLLKKDPKQRLGGGSEDAKEIMQHRFFAGIVWQHVYEKKLSPPFKPQVTSETDTRYFDEEFTAQMITITPPDQDDS
MECVDSERRPHFPQFSYSASGTALEHHHHHH

Purity:> 95% by HPLC

Concentration:0.5mg/ml (determined by absorbance at 280nm)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.