



Product Datasheet

Product Name	AKT1 Human Recombinant
Cata No	CB500862
Source	<i>Baculovirus, SF9 insect cells.</i>
Synonyms	RAC-alpha serine/threonine-protein kinase, EC 2.7.11.1, RAC-PK-alpha, Protein kinase B, C-AKT, AKT, PKB, RAC, PRKBA, MGC99656, RAC-ALPHA.

Description

The serine-threonine protein kinase encoded by the AKT1 gene 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. 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. Multiple alternatively spliced

transcript variants have been found for this gene. AKT1 Human Recombinant produced in SF9 is a glycosylated, polypeptide chain containing 481 amino acids and having a molecular mass of 60 KD. This protein is the full-length form of the protein with a N-terminal His-tag.

AKT1 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered clear solution.

Formulation

AKT1 (0.1mg/ml) is supplied in 50mM Tris pH 7.5, 0.15M NaCl, 0.27M sucrose, 10mM beta-mercaptoethanol, 1mM EGTA. Carrier-free.

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