

32-3086: PKAkt1/PKBa Recombinant Protein

Alternative Name : RAC-alpha serine/threonine-protein kinase, EC 2.7.11.1, RAC-PK-alpha, Protein kinase B, PKB, C-AKT, AKT1, AKT, RAC, PRKBA, MGC99656, RAC-ALPHA.

Description

Source : Sf9 insect cells. PKAkt1 is a glycosylated polypeptide having a molecular mass of 59.1 kDa, fused with a polyhistidine tag at N-terminus (to facilitate removal of Akt1 kinase from the reaction mixture). Inactive enzyme, suitable for negative control experiments or for phosphorylation as a substrate. Recombinant Protein Kinase B is purified by proprietary chromatographic techniques. Akt1, also known as 'Akt' or protein kinase B (PKB) is an important molecule in mammalian cellular signaling. In humans, there are three genes in the 'Akt family': Akt1, Akt2, and Akt3. These enzymes are members of the serine/threonine-specific protein kinase family (EC 2.7.11.1). Akt1 is involved in cellular survival pathways, by inhibiting apoptotic processes. Akt1 is also able to induce protein synthesis pathways, and is therefore a key signaling protein in the cellular pathways that lead to skeletal muscle hypertrophy, and general tissue growth. Since it can block apoptosis, and thereby promote cell survival, Akt1 has been implicated as a major factor in many types of cancer. Akt (now also called Akt1) was originally identified as the oncogene in the transforming retrovirus, AKT8.

Product Info

Amount : 20 µg
Purification : Greater than 90% as determined by SDS-PAGE.
Content : PKAkt1 1.9mg/ml, in 50mM Tris-HCl, 100mM NaCl, 1mM DTT, 25mM beta glycerophosphate, 50% glycerol, pH 8.5.
Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Avoid multiple freeze-thaw cycles.

Application Note

No protease activity (Twinning test). The Specific activity is 235 U/mg.