



Product Datasheet

Product Name	Protein Kinase Akt1/PKB alpha, Active enzyme Human Recombinant
Cata No	CB500813
Source	Sf9 insect cells.
Synonyms	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

Akt1, also known as "Akt" or protein kinaseB (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 (EC2.7.11.1).

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.

Recombinant Human Protein Kinase B is a glycosylated polypeptide having a molecular mass of 59.1 kDa.

Recombinant Protein Kinase B is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered clear solution.

Purity

Greater than 90% as determined by SDS-PAGE.

Formulation

PKAkt1 1.9mg/ml, in 50mM NaCl, 1mM DTT, 25mM beta glycerophosphate, 50% glycerol, pH 8.5.