
Product Data Sheet

Product Name: PKAkt1/PKBa Human

Cat. No.: GP22591

Batch No.: 1

Product Data

Purity	>98%	Source	Sf9 insect cells.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
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.		
Formulation	PKAkt1 in 50mM Tris-HCl, 100mM NaCl, 1mM DTT, 25mM beta glycerophosphate, 50% glycerol, pH 8.5.		

Introduction

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.

Biological Activity

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

Stability

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.

Background

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA