

Product: AKT2, active
Catalog #: 02-2002
Amount: 5 µg

DESCRIPTION:

AKT2 or Protein Kinase B β (PKB β) is a serine/threonine kinase that is a member of the AKT family. AKT2 like the other AKT members is activated in cells in response to diverse stimuli such as hormones, growth factors and extracellular matrix components and is involved in glucose metabolism, transcription, survival, cell proliferation, angiogenesis, and cell motility (1). The PI3K generates phosphatidylinositol-3,4,5-trisphosphate (PIP₃), a lipid second messenger essential for the translocation of AKT2 to the plasma membrane where it is phosphorylated and activated by phosphoinositide-dependent kinase-1 (PDK-1) (2)

The gene accession number is [NM 001626](#)

Gene Aliases: PRKBB; PKBBETA; RAC-BETA

SOURCE:

Recombinant full-length human AKT2 was expressed by baculovirus in Sf9 insect cells using a N-terminal GST tag.

MOLECULAR WEIGHT:

85 kDa

PURITY:

> 90% (by densitometry)

FORM:

Purified, in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, 25% glycerol

CONCENTRATION:

0.1 mg/ml

SPECIFIC ACTIVITY:

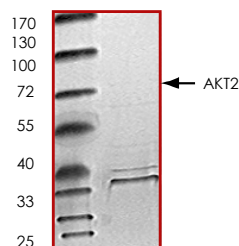
45 nmol/mim/mg

STORAGE:

-70°C (aliquot). AVOID repeated Freeze/thaw cycles

REFERENCE:

1. Coffey, PJ. et al: Protein kinase B (c-Akt): a multifunctional mediator of phosphatidylinositol 3-kinase activation. *Biochem J.* 1998 Oct 1; 335 (Pt 1): 1-13
2. Anderson, KE. et al: Translocation of PDK-1 to the plasma membrane is important in allowing PDK-1 to activate protein kinase B. *Curr Biol.* 1998 Jun 4;8(12): 684-91



This product is sold for laboratory research use or further manufacturing only and should not be used for human therapeutic or diagnostic applications. The information presented is believed to be accurate; however, said information and products are offered without warranty or guarantee since the ultimate conditions of use and the variability of the materials treated are beyond our control. Nothing disclosed herein is to be construed as a recommendation to use our products in violation of any patents. Under no circumstances shall ARP American Research Products, Inc. be liable for damages, whether consequential, compensatory, incidental or special, strict liability or negligence, breach of warranty or any other theory arising out of the use of the products available from ARP American Research Products, Inc. Nothing contained herein warrants that the use of the products will not infringe on the claims of any patents covering the product itself or the use thereof in combination with other products or in the operation of any process.