

Recombinant Human pan-AKT protein (His Tag)

Catalog No. PKSH500002

Note: Centrifuge before opening to ensure complete recovery of vial contents.

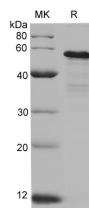
Description

Synonyms	AKT 1, AKT, AKT1_HUMAN, MGC99656, PKB, PKB-ALPHA, PRKBA, Protein Kinase B Alpha, Protein kinase B, Proto-oncogene c-Akt, RAC Alpha, RAC, RAC-alpha serine/threonine-protein kinase, RAC-PK-alpha
Species	Human
Expression Host	E.coli
Sequence	Met1-Ala480
Accession	P31749-1
Calculated Molecular Weight	55.7 kDa
Observed molecular weight	53-58 kDa
Tag	N-His
Bioactivity	Immunogen(E-AB-40329)

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4., 5% trehalose, 5% mannitol, 0.01% tween-80. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the print
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

downstream of phosphatidylinositol 3-kinase (PI3K) to mediate the effects of various growth factors such as platelet-

For Research Use Only

derived growth factor (PDGF), epidermal growth factor (EGF), insulin and insulin-like growth factor I (IGF-I) . AKT mediates the antiapoptotic effects of IGF-I. Essential for the SPATA13-mediated regulation of cell migration and adhesion assembly and disassembly . May be involved in the regulation of the placental development. Phosphorylates STK4/MST1 at 'Thr-120' and 'Thr-387' leading to inhibition of its: kinase activity, nuclear translocation, autophosphorylation and ability to phosphorylate FOXO3 . Phosphorylates STK3/MST2 at 'Thr-117' and 'Thr-384' leading to inhibition of its: cleavage, kinase activity, autophosphorylation at Thr-180, binding to RASSF1 and nuclear translocation. Phosphorylates SRPK2 and enhances its kinase activity towards SRSF2 and ACIN1 and promotes its nuclear translocation. Phosphorylates RAF1 at 'Ser-259' and negatively regulates its activity. Phosphorylation of BAD stimulates its pro-apoptotic activity . Phosphorylates KAT6A at 'Thr-369' and this phosphorylation inhibits the interaction of KAT6A with PML and negatively regulates its acetylation activity towards p53/TP53. Phosphorylates palladin (PALLD), modulating cytoskeletal organization and cell motility. Phosphorylates prohibitin (PHB), playing an important role in cell metabolism and proliferation. Phosphorylates CDKN1A, for which phosphorylation at 'Thr-145' induces its release from CDK2 and cytoplasmic relocalization.

For Research Use Only