

Recombinant Human AKT3 Protein

Catalog No.: RP03143 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	10000	Q9Y243

Tags

N-GST

Synonyms

AKT3; PKBG; PKB-GAMMA; PRKBG; MPPH;
MPPH2; RAC-gamma; RAC-PK-gamma;
STK-2

Product Information

Source	Purification
Baculovirus-Insect Cells	> 90% by SDS-PAGE.

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the tube before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

Contact

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Background

v-akt murine thymoma viral oncogene homolog 3 (AKT3), also known as PKB-GAMMA, with AKT1/PKBalpha, AKT2/PKBbeta, are the members of Akt kinase family, share extensive structural similarity and perform common as well as unique functions within cells. The Akt signaling cascade initiates at the cell surface when growth factors or other extracellular stimuli activate phosphoinositide 3-kinase (PI3K). AKT3 was discovered to be the predominant isoform activated in sporadic melanomas. Levels of activity increased during melanoma progression with metastatic melanomas having the highest activity. Although mechanisms of AKT3 activation remain to be fully characterized, overexpression of AKT3 and decreased PTEN activity play important roles in this process. Targeted reduction of AKT3 activity decreased survival of melanoma tumor cells leading to inhibition of tumor development, which may be therapeutically effective for shrinking tumors in melanoma patients. AKT2 and AKT3 play an important role in the viability of human malignant glioma cells. Targeting AKT2 and AKT3 may hold promise for the treatment of patients with gliomas.

Basic Information

Description

Recombinant Human AKT3 Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Met1-Glu479) of human AKT3 (Accession #NP_005456.1) fused with GST tag at the N-terminus.

Bio-Activity

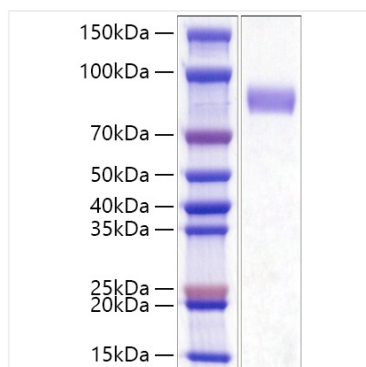
Storage

Store the lyophilized protein at -20°C to -80 °C for long term.

After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week.

Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human AKT3 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 75-95 kDa.