Recombinant Human PS6K/RPS6KB1 Protein (GST Tag)

Catalog Number: PKSH031881

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

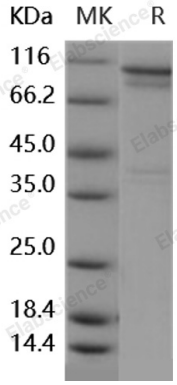
Description

Species	Human
Source	Baculovirus-Insect Cells-derived Human PS6K/RPS6KB1 protein Met 1-Leu525, with an N-terminal GST
Calculated MW	85.4 kDa
Observed MW	96 kDa
Accession	P23443
Bio-activity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
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 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol, 1mM GSH Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

PS6K, also known as RPS6KB1, is a serine/threonine-protein kinase. It belongs to the RSK (ribosomal s6 kinase) family. Members of this family function in signal transduction. PS6K is an isoform of p70 ribosomal S6 kinase (S6K). S6K can be activated by mitogenic stimuli such as growth factors, insulin and cytokines. It phosphorylates the ribosomal protein S6. PS6K also phosphorylates other proteins such as eIF4B, eEF2K and SKAR. It is a crucial effector of mTOR(rapamycin) signaling. PS6K is dissociated from the EIF3 complex and activated upon mitogenic stimulation, phosphorylation by the mammalian target of mTOR complex 1 (mTORC1). Its active form then phosphorylates and activates several substrates in the preinitiation complex, including the EIF2B complex and the ca p-binding complex component EIF4B. PS6K also functions in cell proliferation, cell growth and cell cycle progression.