



Recombinant Protein Technical Manual
Recombinant Human PS6K/RPS6KB1 Protein (GST
Tag)
RPES2161

Product Data:

Product SKU: RPES2161

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: P23443-Alpha I

Protein Information:

Molecular Mass: 85.4 kDa

AP Molecular Mass: 96 kDa

Tag: N-GST

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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% gly, 1mM GSH

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: p70 S6KA;p70(S6K)-alpha;p70-alpha;p70-S6K;PS6K;RPS6KB1;S6K;S6K-beta;S6K1;STK14A

Immunogen Information:

Sequence: Met 1-Leu525

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 cap-binding complex component EIF4B. PS6K also functions in cell proliferation, cell growth and cell cycle progression.