

Recombinant Human RSK4/RPS6KA6 Protein (GST Tag)

Catalog No. PKSH030423

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

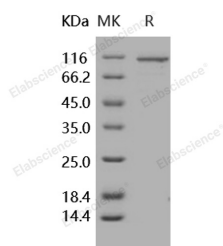
Description

Synonyms	PP90RSK4;RSK4
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Leu 745
Accession	NP_055311.1
Calculated Molecular Weight	110 kDa
Observed molecular weight	110 kDa
Tag	N-GST
Bioactivity	Not validated for activity

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
Formulation	Supplied as sterile solution of 50mM Tris, 100mM NaCl, 0.5mM Reduced Glutathione, 10% glycerol, 0.5mM PMSF, 0.5mM EDTA, pH 8.0
Reconstitution	Not Applicable

Data



> 85 % as determined by reducing SDS-PAGE.

Background

Ribosomal protein S6 kinase alpha-6, also known as Ribosomal S6 kinase 4, 90 kDa ribosomal protein S6 kinase 6, RSK-4, RSK4 and RPS6KA6, is a protein which belongs to the protein kinase superfamily, AGC Ser/Thr protein kinase family and S6 kinase subfamily. RPS6KA6 contains one AGC-kinase C-terminal domain and two protein kinase domains. RPS6KA6 forms a complex with either ERK1 or ERK2 in quiescent cells. RPS6KA6 shows a high level of homology to three isolated members of the human RSK family. RSK2 is involved in Coffin-Lowry syndrome and nonspecific MRX.

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The localization of RPS6KA6 in the interval that is commonly deleted in mentally retarded males together with the high degree of amino acid identity with RSK2 suggests that RPS6KA6 plays a role in normal neuronal development. Further mutation analyses in males with X-linked mental retardation must prove that the gene of RPS6KA6 is indeed a novel MRX gene. RPS6KA6 is a serine/threonine kinase that may play a role in mediating the growth-factor and stress induced activation of the transcription factor CREB. RPS6KA6 is activated by multiple phosphorylations on threonine and serine residues.