

## Recombinant Human RSK4/RPS6KA6 Protein (GST Tag)

**Catalog Number:** PKSH030423

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

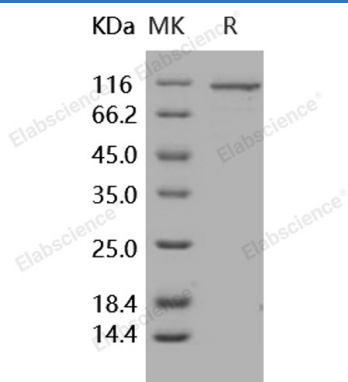
### Description

<b>Species</b>	Human
<b>Source</b>	Baculovirus-Insect Cells-derived Human RSK4/RPS6KA6 protein Met 1-Leu 745, with an N-terminal GST
<b>Mol_Mass</b>	110 kDa
<b>Accession</b>	NP_055311.1
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 85 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	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.
<b>Formulation</b>	Supplied as sterile solution of 50mM Tris, 100mM NaCl, 0.5mM Reduced Glutathione, 10% glycerol, 0.5mM PMSF, 0.5mM EDTA, pH 8.0
<b>Reconstitution</b>	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. 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.

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