

Product datasheet for **TP527425**

Rps6ka1 (NM_009097) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse ribosomal protein S6 kinase polypeptide 1 (Rps6ka1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR227425 representing NM_009097 Red =Cloning site Green =Tags(s) MPLAQLKEPWPLMELVPLDPENGGQTSGEEAGLQPSKDEAILKEISITHHVKAGSEKADPSQFELLKVLGQ GSFGKVFLVRKVTRPDSGHLIYAMKVLKATLKVRDRVRTKMERDILADVNHFPVWKLHYAFQTEGKLYLI LDFLRGGDLFTRLSKEVMFTEEDVKFYLAELALGLDHLHSLGIYRDLKPENILLDEEGHIKLTDFGLSK EAIDHEKKAYSFCGTVEYMAPEVNRQGHHSADWWSYGVLMEMLTGSPLFPQKDRKETMTLILKAKLG MPQFLSTEAQSLLRALFKRNPANRLGSGPDGAEIKRHIFYSTIDWNKLYRREIKPPFKPAVAQPDDTFY FDTEFTSRTPRDSPGIPPSAGAHQLFRGFVATGLMEDDGKPRTTQAPLHSSVQQQLHGKLNLFSDGYVW KETIGVGSYSVCKRVCVKATNMEYAVKVIDKSKRDPSEEIEILLRYGQHPNIITLKDVEDDGGKHVYLVE LMRGGELLDKILRQKFFSEREASVFLHTISKTVEYLHSQGVVHRDLKPSNILYVDESGNPECLRICDFGF AKQLRAENGLLMTPCYTANFVAPEVLKRQGYDEGCDIWSLGILLYTMLAGYTPFANGPSDTPPEILTRIG SGKFTLSGGNWNTVSETAKDLVSKMLHVDPHQRLTAKQVLQHPWITQKDKLPQSLSHQDLQLVKGAMAA TYSALNSSKPTPQLKPIESSILAQRRVRKLPSTTL TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-MYC/DDK
Predicted MW:	83.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.



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Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_033123
Locus ID:	20111
UniProt ID:	Q505N6 , Q810V8
RefSeq Size:	3153
Cytogenetics:	4 D2.3
RefSeq ORF:	2205
Synonyms:	Mapkapk-1a; p90-Rsk1; p90rsk; p90Rsk1; p90S6K; Rsk; Rsk-1; Rsk1; S6K-alpha-1
Summary:	<p>Serine/threonine-protein kinase that acts downstream of ERK (MAPK1/ERK2 and MAPK3/ERK1) signaling and mediates mitogenic and stress-induced activation of the transcription factors CREB1, ETV1/ER81 and NR4A1/NUR77, regulates translation through RPS6 and EIF4B phosphorylation, and mediates cellular proliferation, survival, and differentiation by modulating mTOR signaling and repressing pro-apoptotic function of BAD and DAPK1. In fibroblast, is required for EGF-stimulated phosphorylation of CREB1, which results in the subsequent transcriptional activation of several immediate-early genes. In response to mitogenic stimulation (EGF and PMA), phosphorylates and activates NR4A1/NUR77 and ETV1/ER81 transcription factors and the cofactor CREBBP. Upon insulin-derived signal, acts indirectly on the transcription regulation of several genes by phosphorylating GSK3B at 'Ser-9' and inhibiting its activity. Phosphorylates RPS6 in response to serum or EGF via an mTOR-independent mechanism and promotes translation initiation by facilitating assembly of the pre-initiation complex. In response to insulin, phosphorylates EIF4B, enhancing EIF4B affinity for the EIF3 complex and stimulating cap-dependent translation. Is involved in the mTOR nutrient-sensing pathway by directly phosphorylating TSC2 at 'Ser-1798', which potently inhibits TSC2 ability to suppress mTOR signaling, and mediates phosphorylation of RPTOR, which regulates mTORC1 activity and may promote rapamycin-sensitive signaling independently of the PI3K/AKT pathway. Mediates cell survival by phosphorylating the pro-apoptotic proteins BAD and DAPK1 and suppressing their pro-apoptotic function. Promotes the survival of hepatic stellate cells by phosphorylating CEBPB in response to the hepatotoxin carbon tetrachloride (CCl4). Mediates induction of hepatocyte proliferation by TGFA through phosphorylation of CEBPB (PubMed:10635333). Is involved in cell cycle regulation by phosphorylating the CDK inhibitor CDKN1B, which promotes CDKN1B association with 14-3-3 proteins and prevents its translocation to the nucleus and inhibition of G1 progression (By similarity). Phosphorylates EPHA2 at 'Ser-897', the RPS6KA-EPHA2 signaling pathway controls cell migration (By similarity).[UniProtKB/Swiss-Prot Function]</p>