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Product datasheet for TP511125

Dapk1 (BC060161) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse death associated protein kinase 1 (cDNA clone MGC:61377 IMAGE:6821014), complete cds, with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR211125 protein sequence Red=Cloning site Green=Tags(s) MTVFRQENVDDYYDTGEELGSGQFAVVKKCREKSTGLQYAAKFIKKRRTKSSRRGVSREDIEREVSILKE IRHPNVITLHEVYENKTDVILILELVAGGELFDFLAEKESLTEEEATEFLKQILSGVYYLHSLQIAHFDL KPENIMLLDRNVPKPRIKIIDFGLAHKIDFGNEFKNIFGTPEFVAPEIVNYEPLGLEADMWSIGVITYIL LSGASPFLGDTKQETLANVSAVNYDFEEEFFRNTSTLAKDFIRRLLVKDPKKRMTIQDSLQHPWIKPKDT QQALSRKASAVNMEKFKKFAARKKWKQSVRLISLCQRLSRSFLSRSNMSVARSDDTLDEEDSFVMKAIIH AINDDNVPGLQHLLGSLSSYDVNQPNKHGTPPLLIAAGCGNIQMLQLLIKRGSRIDVQDKGGSNAIYWAS RHGHVDTLKFLNENKCPLDVQDKSGETALHVAARYGHADVVQLLCSFGSNPDFQDKEEETPLHCAAWHGY YSVAKALCEVGCNVNIKNREGETPLLTASARGYHDIVECLAEHGADLNASDKDGHIALHLAVRRCQMEVI KTLLGHGSFVDFQDRHGNTPLHVACKDGSAPIVVALCEASCNLDISNKYGRTPLHLAANNGILDVVRYLC LMGANVEALTSDGKTAEDLAKAEQHEHVAGLLARLRKDTHRGLFIQQLRPTQNLQPRIKLKLFGHSGSGK STLVESLKCGLLRSFFRRRRPRLSSTNSTRFPPSPLAAKPTVSVSINNLYPGCENVSVRSRSMMFEPGLT KGMLEVFVAPSHHLHCSTDDQSTKAIDIQNAYLNGVGDFSVWEFSGNPVYFCCYDYFAANDPTSIHIIVF SLEEPYEIQLNQVIFWLSFLKSLVPVEEPIAFGGKLKNPLRVVLVATHADIMNIPRPAGGEFGYD TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-MYC/DDK
Predicted MW:	101.2 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

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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.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Locus ID:	69635
UniProt ID:	Q80YE7
RefSeq Size:	5056
Cytogenetics:	13 32.53 cM
RefSeq ORF:	2715
Synonyms:	D13Ucla1; DAP-Kinase
Summary:	Calcium/calmodulin-dependent serine/threonine kinase involved in multiple cellular signaling pathways that trigger cell survival, apoptosis, and autophagy. Regulates both type I apoptotic and type II autophagic cell deaths signal, depending on the cellular setting. The former is caspase-dependent, while the latter is caspase-independent and is characterized by the accumulation of autophagic vesicles. Phosphorylates PIN1 resulting in inhibition of its catalytic activity, nuclear localization, and cellular function. Phosphorylates TPM1, enhancing stress fiber formation in endothelial cells. Phosphorylates STX1A and significantly decreases its binding to STXBP1. Phosphorylates PRKD1 and regulates JNK signaling by binding and activating PRKD1 under oxidative stress. Phosphorylates BECN1, reducing its interaction with BCL2 and BCL2L1 and promoting the induction of autophagy. Phosphorylates TSC2, disrupting the TSC1-TSC2 complex and stimulating mTORC1 activity in a growth factor-dependent pathway. Phosphorylates RPS6, MYL9 and DAPK3 (By similarity). Acts as a signaling amplifier of NMDA receptors at extrasynaptic sites for mediating brain damage in stroke. Cerebral ischemia recruits DAPK1 into the NMDA receptor complex and it phosphorylates GRINB at Ser-1303 inducing injurious Ca(2+) influx through NMDA receptor channels, resulting in an irreversible neuronal death. Required together with DAPK3 for phosphorylation of RPL13A upon interferon-gamma activation which is causing RPL13A involvement in transcript-selective translation inhibition.[UniProtKB/Swiss-Prot Function]