

Product datasheet for TP523685

Brsk2 (NM_001009930) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse BR serine/threonine kinase 2 (Brsk2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR223685 representing NM_001009930 Red =Cloning site Green =Tags(s)
	<p>MTSTGKDGGGAQHAQYVGPYRLEKTLGKGQTGLVKLGIHCVTCQKVAIKIVNREKLSVLMKVEREIAI LKLIEHPHVLKLDVYENKKYLYLVLEHVS GGELFDYLVKKGRLTPKEARKFFRQIISALDFCHSHSICH RDLKPENLLLDERNNIRIADFGMASLQVGDLSLETCGSPHYACPEVIRGEKYDGRKADVWSCGVILFAL LVGALPFDDNLRQLLEKVKRGV FHPHFIPPDCQSLLRGMIEVDAARRLTLEHIQKHIWYIGGKNEPEP EQIPRQVQIRSLPSLEDIDPDVLD SMHSLGCFRDRNKLLQDLLSEENQEKMIFLLDRKERYPSHED EDLPPRNEIDPPRKRVDSPMLNRHGKRRPERKSMEVLSVTDGGSPVPARRAEMAQHGQRSRSISGASSG LSTSPLSSPRVTPHPSRGSPLPTPKGTPVHTPKESPAGTPNPTPPSSPSVGGVPWRTRLNSIKNSFLGS PRFHRRKLQVPTPEEMSNLTPESSPELAKKSWFGNFINLEKEEQIFVVIKDKPLSSIKADIVHAFLSIPS LSHSVISQTSFRAEYKATGGPAVFQKPVKFQVDITYTEGGEAQKENGIVSVTFTLLSGPSRRFKRVETI QAQLLSTHDQPSAQHLSDTTNCMEVMTGRLSKCDEKNGQAAQAPSTPAKRSAHGPLGDSAAAGPGGDTEY PMGKDMAKMGPPAARREQP</p> <p>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</p>
Tag:	C-MYC/DDK
Predicted MW:	80.4 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_001009930
Locus ID:	75770
UniProt ID:	Q69Z98
RefSeq Size:	2160
Cytogenetics:	7 F5
RefSeq ORF:	2157
Synonyms:	4833424K13Rik; SAD-A; SADA
Summary:	<p>Serine/threonine-protein kinase that plays a key role in polarization of neurons and axonogenesis, cell cycle progress and insulin secretion. Phosphorylates CDK16, CDC25C, MAPT/TAU, PAK1 and WEE1. Following phosphorylation and activation by STK11/LKB1, acts as a key regulator of polarization of cortical neurons, probably by mediating phosphorylation of microtubule-associated proteins such as MAPT/TAU at 'Thr-504' and 'Ser-554'. Also regulates neuron polarization by mediating phosphorylation of WEE1 at 'Ser-642' in post-mitotic neurons, leading to down-regulate WEE1 activity in polarized neurons. Plays a role in the regulation of the mitotic cell cycle progress and the onset of mitosis. Plays a role in the regulation of insulin secretion in response to elevated glucose levels, probably via phosphorylation of CDK16 and PAK1. While BRSK2 phosphorylated at Thr-175 can inhibit insulin secretion (PubMed:22798068), BRSK2 phosphorylated at Thr-261 can promote insulin secretion (PubMed:22669945). Regulates reorganization of the actin cytoskeleton. May play a role in the apoptotic response triggered by endoplasmic reticulum (ER) stress.[UniProtKB/Swiss-Prot Function]</p>