

Product datasheet for PH323466

BRSK2 (NM_003957) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	BRSK2 MS Standard C13 and N15-labeled recombinant protein (NP_003948)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC223466
Predicted MW:	74.6 kDa
Protein Sequence:	>RC223466 representing NM_003957 Red=Cloning site Green=Tags(s)

MTSTGKDGGQAHAQYVGPYRLEKTLGKGQTGLVKLGVHCVTCQKVAIKIVNREKLSSESVLMKVEREIAIL
KLIIEHPHVLKLDVYENKKYLYLVLEHVS GGELFDYLVKKGR LTPKEARKFFRQIISALDFCHSHSICH
DLKPENLLLDKNNIRIADFGMASLQVGD SLELETSCGSPHYACPEVIRGEKYDGRKADVWSCGVILFALL
VGALPFDDNLRQLLEKVKRGVFMHPHIPPDCQSLLRGMIEVDAARRLTLEHIQKHIWIYIGGKNEPEPE
QPIPRKQVIRSLPSLEDIDPDVLD SMHSLGCFRDRNKLLQDLLSEEENQEKM IYFLLDRKERYPSQEDE
DLPPRNEIDPPRKRVDSPMLNRHGKRRPERKSMEVLSVTDGGSPVPARRAIEMAQHQRSRISIGASSGL
STSPLSSPRVTPHPSPRGSPLPTPKGTPVHTPKESPAGTPNPTPPSSPSVGGVPWRARLNSIKNSFLGSP
RFHRRKLVQPTPEEMSNLTPESP ELAKKSWFGNFI SLEKEEQIFVVIKDKPLSSIKADIVHAFLSIPSL
SHSVISQTSFRAEYKATGGPAVFQKPVKFQVDITYTEGGEAQKENG IYSVTFLLSGPSRRFKRVVETIQ
AQLLSTHDPAAQHLSDTTNCMEMMTGRLSKCGIIPKS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_003948
RefSeq Size:	3516



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RefSeq ORF: 2004

Synonyms: C11orf7; PEN11B; SAD1; SADA; STK29

Locus ID: 9024

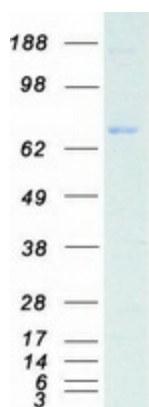
UniProt ID: [Q8IWQ3](#), [A0A140VJF6](#)

Cytogenetics: 11p15.5

Summary: 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-529' and 'Ser-579'. Also regulates neuron polarization by mediating phosphorylation of WEE1 at 'Ser-642' in postmitotic 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-174 can inhibit insulin secretion (PubMed:22798068), BRSK2 phosphorylated at Thr-260 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]

Protein Families: Druggable Genome, Protein Kinase

Product images:



Coomassie blue staining of purified BRSK2 protein (Cat# [TP323466]). The protein was produced from HEK293T cells transfected with BRSK2 cDNA clone (Cat# [RC223466]) using MegaTran 2.0 (Cat# [TT210002]).