

## Product datasheet for **TP323466L**

### **BRSK2 (NM\_003957) Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant protein of human BR serine/threonine kinase 2 (BRSK2), 1 mg
<b>Species:</b>	Human
<b>Expression Host:</b>	HEK293T
<b>Expression cDNA Clone or AA Sequence:</b>	>RC223466 representing NM_003957 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MTSTGKDGGGAQHAQYVGPYRLEKTLGKGQTGLVKLVHCVTCQKVAIKIVNREKLSSEVLMKVEREIAL  
KLIHPPHVLKLDVYENKKYLYLVLEHVSGGELFDYLVKKGRRLTPKEARKFFRQIISALDFCHSHSICHR  
DLKPENLLLDEKNNIRIADFGMASLQVGDLSLETSCGSPHYACPEVIRGEKYDGRKADVWSCGVILFALL  
VGALPFDDDNLRQLLEKVKRGVFMHPHFIPPDCQSLLRGMIEVDAARRLLEHIQKHIWIYIGGKNEPEPE  
QPIPRKVQIRSLPSLEDIDPDVLDMSHSLGCFRDRNKLLQDLLSEENQEKMIFLLLDRKERYPSQEDE  
DLPPRNEIDPPRKRVDSPMLNRHGKRRPERKSMEVLSVTDGGSPVPARRAEMAQHGQRSRSISGASSGL  
STSPLSSPRVTPHPSRGSPLTPKGTVPVHTPKESPAGTPNPTPPSSPSVGGVPWRARLNSIKNSFLGSP  
RFHRRKLQVPTPEEMSNTPESSPELAKKSWFGNFISLEKEEQIFVVIKDKPLSSIKADIVHAFLSIPSL  
SHSVISQTSFRAEYKATGGPAVFQKPKVFQVDITYTEGGEAQKENGIVSVTFTLLSGPSRRFRKRVETIQ  
AQLLSTHDPPAAQHLSDTTNCMEMMTGRLSKCGIIPKS

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

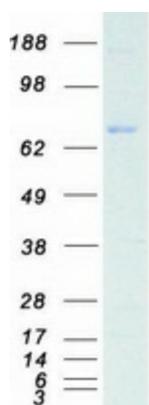
<b>Tag:</b>	C-Myc/DDK
<b>Predicted MW:</b>	74.6 kDa
<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.



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<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_003948</a>
<b>Locus ID:</b>	9024
<b>UniProt ID:</b>	<a href="#">Q8IWQ3</a> , <a href="#">A0A140VJF6</a>
<b>RefSeq Size:</b>	3516
<b>Cytogenetics:</b>	11p15.5
<b>RefSeq ORF:</b>	2004
<b>Synonyms:</b>	C11orf7; PEN11B; SAD1; SADA; STK29
<b>Summary:</b>	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]
<b>Protein Families:</b>	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]).