

Product datasheet for **MR223685**

Brsk2 (NM_001009930) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Brsk2 (NM_001009930) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Brsk2
Synonyms:	4833424K13Rik; SAD-A; SADA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>MR223685 representing NM_001009930
 Red=Cloning site Blue=ORF Green=Tags(s)

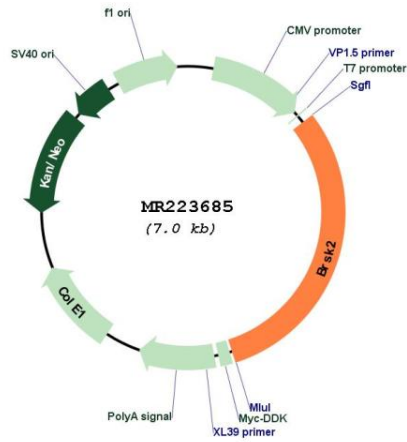
TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACATCGACGGGAAGGACGGCGGGCGCAGCACGCGCAGTATGTGGGGCCCTACCGGCTGGAGA
 AGACGCTGGGCAAGGGGCAGACAGGCTTGGTGAAGCTGGGAATCCACTGTGTCACTTGCCAGAAGGTCGC
 CATCAAAATCGTGAACCGTGAGAAGCTCAGTGAGTCGGTCTGATGAAGGTGGAGCGAGAGATTGCCATC
 TTGAAGCTCATCGAGCATCCACATGTAAGCTGCATGACGTCTATGAAAACAAAAAATTTTATAACC
 TGGTGCTAGAACATGTGTCTGGGGGAGAGCTGTTGACTACCTGGTGAAGAAGGGCCGGCTGACCCCAA
 GGAGGCCCGCAAGTTCTCCGGCAGATCATCTGCACTGGACTTCTGTACAGCCACTCCATATGCCAT
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 GATTCCGGGGCAGAAAGTATGATGGCCGCAAGGCAGATGTGTGGAGCTGTGGTGTGATCCTGTTCCGCTTG
 CTGGTGGGGGCTCTGCCTTTTATGATGATGACAACCTGCGGCAGTTGCTGGAGAAGGTCAAGCGTGGTGTGT
 TCCACATGCCACACTTTATCCCACCAGACTGCCAGAGTCTCCTGCGTGGCATGATTGAGGTGGATGCAGC
 TCGGCGCCTCACGCTAGAGCACATTCAGAAACACATATGGTATATAGGTGGCAAGAATGAGCCAGAGCCC
 GAACAGCCCATCCCACGCAAGGTGCAGATCCGCTCACTACCCAGCTTGAAGACATTGACCTGATGTGT
 TGGACAGCATGCACTCACTGGGCTGTTCCGAGACCGCAACAAGTGTGTCAGGATCTGCTATCTGAGGA
 GGAGAATCAGGAAAAGATGATTTATTTCTCCTCCTGGATCGGAAAGAACGGTATCCAAGCCATGAGGAT
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 ATGGCAAGCGGGCAGCTGAGCGCAAGTCCATGGAAGTGTGTCAGTGTGACAGATGGTGGCTCCCGAGTCC
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 CTTTCTACAAGTCCACTCAGCAGTCTCAGGCGTACCCCTCACCCCTACCAAGGGGTAGTCCCCTTCCCTA
 CCCCCAAGGGGACGCTGTCCACACGCCAAAGGAGAGCCAGCTGGCACACCCCAACCCACACCACCATC
 CAGCCCTAGTGTGGAGGAGTCCCTGGCGGACACGACTGAACTCCATCAAGAACAGCTTCTGGGCTCA
 CCTCGATTCCACCGCCGAAACTCCAAGTTCACGCGCAGAGGAGATGTCCAACCTGACCCAGAACTCCT
 CTCCAGAGCTGGCAAGAAATCGTGGTTCGGGAACCTCATCAACCTGGAGAAGGAGGAGCAGATCTTTGT
 GGTGATCAAGGACAAGCCCTGAGCTCCATCAAGGCTGACATCGTTCATGCCTTCTGTCGATCCCAGC
 CTAGCCACAGCGTTATTTCCAGACAAGCTTCAGGGCTGAATACAAGGCCACAGGGGGCCAGCAGTGT
 TCCAGAAGCCGGTCAAGTTCAGGTGGACATCACCTACACTGAGGGCGGAGAGGCCAGAAAGGAGAATGG
 CATCTACTCAGTCACATTCACTTACTCTCAGGCCCAAGTTCGCGCTTCAAGAGGGTGGTGGAGACCATC
 CAGGCCAGCTGTTAAGCACCCATGACCAGCCATCAGCCAGCACCTGTGACAGCCACTAACTGTATGG
 AAGTGTGACGGGGCGGCTTTCCAAATGTGACGAGAAGAACGGGCAGGCGGCCAGGCCCCAGCACACC
 CGCCAAGCGGAGTGCCACGGCCCCCTGGGTGACTCCGCGGCCGCTGGCCCTGGAGGGGACACCGAGTAC
 CCGATGGCAAGGACATGGCAAGATGGGGCCGCCCGCCCGCCGCTGAGCAGCCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_001009930.3</u> , <u>NP_001009930.1</u>
RefSeq Size:	2160 bp
RefSeq ORF:	2160 bp
Locus ID:	75770
UniProt ID:	<u>Q69Z98</u>
Cytogenetics:	7 F5
MW:	80.4 kDa
Gene 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.</p> <p>[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR223685