

Datasheet for ABIN7564016
BRSK2 Protein (AA 1-735) (His tag)



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Overview

Quantity:	1 mg
Target:	BRSK2
Protein Characteristics:	AA 1-735
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This BRSK2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Brsk2 Protein expressed in mammalian cells.
Sequence:	MTSTGKDG GG AQHAQYVGPY RLEKTLGKGQ TGLVKLGIHC VTCQKVAIKI VNREKLSSEV LMKVEREIAI LKLIHPPHVL KLHDVYENKK YLYLVLEHVS GGELFDYLVK KGRLTPKEAR KFFRQIISAL DFCHSHSICH RDLKPENLLL DERNNIRIAD FGMASLQVGD SLELETSCGSP HYACPEVIRG EKYDGRKADV WSCGVILFAL LVGALPFDDD NLRQLLEKVK RGVFHMPPHFI PPDCQSLLRG MIEVDAARRL TLEHIQKHIW YIGGKNEPEP EQIPRQVQI RSLPSLEDID PDVLDMSHSL GCFRDRNKLL QDLLSEENQ EKMIYFLLLD RKERYPSHED EDLPPRNEID PPRKRVDSPM LNRHGKRRPE RKSMEVLSVT DGGSPVPARR AIEMAQHGQR SRSISGASSG LSTSPLSSPR VTPHPSRGS PLPTPKGTPV HTPKESPAGT PNPTPPSSPS VGGVPWRTRL NSIKNSFLGS PRFHRRKLQV PTPEEMSNLT PESSPELAKK SWFGNFINLE KEEQIFVVIK DKPLSSIKAD IVHAFLSIPS LSHSVISQTS FRAEYKATGG PAVFQKPVKF QVDITYTEGG EAQKENGIYS VTFTLLSGPS RRFKRVVETI QAQLLSTHDQ PSAQHLSDTT NCMEVMTGRL

Product Details

SKCGTPLSNF FDVIKQLFSD EKNGQAAQAP STPAKRSAHG PLGDSAAAGP GGDTEYPMGK
DMAKMGPPAA RREQP **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Characteristics:

Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

BRSK2

Alternative Name:

Brsk2 ([BRSK2 Products](#))

Background:

Serine/threonine-protein kinase BRSK2 (EC 2.7.11.1) (EC 2.7.11.26) (Brain-specific serine/threonine-protein kinase 2) (BR serine/threonine-protein kinase 2) (Serine/threonine-protein kinase SAD-A),FUNCTION: 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.

Target Details

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.

{ECO:0000269|PubMed:15705853, ECO:0000269|PubMed:17482548, ECO:0000269|PubMed:20026642, ECO:0000269|PubMed:22669945, ECO:0000269|PubMed:22798068}.

Molecular Weight: 81.7 kDa

UniProt: [Q69Z98](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months