

Datasheet for ABIN7552885
BRSK2 Protein (AA 1-736) (His tag)



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Overview

Quantity:	1 mg
Target:	BRSK2
Protein Characteristics:	AA 1-736
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This BRSK2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant BRSK2 Protein expressed in mammalian cells.
Sequence:	MTSTGKDGGA QHAQYVGPYR LEKTLGKGQT GLVKLGVHCV TCQKVAIKIV NREKLSSEVL MKVEREIAIL KLIHHPVLK LHDVYENKKY LYLVLHVSG GELFDYLVKK GRLTPKEARK FFRQIISALD FCHSHSICHR DLKPENLLLD EKNNIRIADF GMASLQVGDS LLETSCGSPH YACPEVIRGE KYDGRKADVW SCGVILFALL VGALPFDDDN LRQLEKVKR GVFHMPHFIP PDCQSLLRGM IEVDAARRLT LEHIQKHIWY IGGKNEPEPE QPIPRKVQIR SLPSLEDIDP DVLDSMHS LG CFRDRNKLLQ DLLSEENQE KMIYFLLDDR KERYPSQEDE DLPPRNEIDP PRKRVDSPML NRHGKRRPER KSMEVLSVTD GGSPVPARRA IEMAQHGQRS RSISGASSGL STSPLSSPRV TPHPSPRGSP LPTPKGTPVH TPKESPAGTP NPTPPSSPSV GGVPWRARLN SIKNSFLGSP RFHRRKLQVP TPEEMSNLTP ESSPELAKKS WFGNFISLEK EEQIFVVIKD KPLSSIKADI VHAFLSIPSL SHSVISQTSF RAEYKATGGP AVFQKPVKFQ VDITYTEGGE AQKENGIYSV TFTLLSGPSR RFKRVVETIQ AQLLSTHDPP AAQHLSDTTN CMEMMTGRSL KCGSPLSNFF DVIKQLFSDE KNGQAAQAPS TPAKRSAGHP LGDSAAAGPG PGGDAEYPTG

Product Details

KDTAKMGPPT ARREQP **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.**

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

Target Details

Target: BRSK2

Alternative Name: BRSK2 ([BRSK2 Products](#))

Background: Serine/threonine-protein kinase BRSK2 (EC 2.7.11.1) (Brain-selective kinase 2) (EC 2.7.11.26) (Brain-specific serine/threonine-protein kinase 2) (BR serine/threonine-protein kinase 2) (Serine/threonine-protein kinase 29) (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-529' and 'Ser-579'. Also regulates

Target Details

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. {ECO:0000269|PubMed:14976552, ECO:0000269|PubMed:20026642, ECO:0000269|PubMed:21985311, ECO:0000269|PubMed:22669945, ECO:0000269|PubMed:22798068, ECO:0000269|PubMed:23029325}.

Molecular Weight: 81.6 kDa

UniProt: [Q8IWQ3](#)

Application Details

Application Notes: We expect the protein to work for functional studies. 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