

Datasheet for ABIN7552884  
**BRSK1 Protein (AA 1-778) (His tag)**



[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	BRSK1
Protein Characteristics:	AA 1-778
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This BRSK1 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant BRSK1 Protein expressed in mammalian cells.
Sequence:	MSSGAKEGGG GSPAYHLPHP HPHPPQHAQY VGPYRLEKTL GKGQTGLVKL GVHCITGQKV AIKIVNREKL SESVLMKVER EIAILKIEH PHVLKLHDVY ENKKYLYLVL EHVSGGELFD YLKKGRLTP KEARKFFRQI VSALDFCHSY SICHRLDKPE NLLLDEKNNI RIADFGMASL QVGDSLLETS CGSPHYACPE VIKGEKYDGR RADMWSCGVI LFALLVGALP FDDDNLRQLL EKVKRGVFHM PHFIPPDCQS LLRGMIEVEP EKRLSLEIQ KHPWYLGKX EPDPCLEPAP GRRVAMRSLP SNGELDPDLV ESMASLGCFR DRERLHREL RSEEENQEKMI YLLLLDRKER YPSCEDQDLP PRNDVDPPRK RVDSPMLSRH GKRRPERKSM EVLSITDAGG GGSPVPTRRA LEMAQHSQRS RSVSGASTGL SSSPLSSPRS PVFVSPEPG AGDEARGGGS PTSKTQTLPS RGPRGGGAGE QPPPSARST PLPGPPGSPR SSGGTPLHSP LHTPRASPTG TPGTTPPPSP GGGVGGAAWR SRLNSIRNSF LGSPRFHRRK MQVPTAEEMS SLTPESPEL AKRSWFGNFI SLDKEEQIFL VLKDKPLSSI KADIVHAFLS IPSLSHSVLS QTSFRAEYKA SGGPSVFQKP VRFQVDISSS EGPEPSPRRD GSGGGGIYSV TFTLISGPSR RFKRVVETIQ AQLLSTHDQP

## Product Details

---

SVQALADEKN GAQTRPAGAP PRSLQPPPGR PDPELSSSPR RGPPKDKKLL ATNGTPLP

**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:** BRSK1

**Alternative Name:** BRSK1 ([BRSK1 Products](#))

**Background:** Serine/threonine-protein kinase BRSK1 (EC 2.7.11.1) (Brain-selective kinase 1) (EC 2.7.11.26) (Brain-specific serine/threonine-protein kinase 1) (BR serine/threonine-protein kinase 1) (Serine/threonine-protein kinase SAD-B) (Synapses of Amphids Defective homolog 1) (SAD1 homolog) (hSAD1),FUNCTION: Serine/threonine-protein kinase that plays a key role in polarization of neurons and centrosome duplication. Phosphorylates CDC25B, CDC25C, MAPT/TAU, RIMS1, TUBG1, TUBG2 and WEE1. Following phosphorylation and activation by STK11/LKB1, acts as a key regulator of polarization of cortical neurons, probably by mediating

## Target Details

---

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. In neurons, localizes to synaptic vesicles and plays a role in neurotransmitter release, possibly by phosphorylating RIMS1. Also acts as a positive regulator of centrosome duplication by mediating phosphorylation of gamma-tubulin (TUBG1 and TUBG2) at 'Ser-131', leading to translocation of gamma-tubulin and its associated proteins to the centrosome. Involved in the UV-induced DNA damage checkpoint response, probably by inhibiting CDK1 activity through phosphorylation and activation of WEE1, and inhibition of CDC25B and CDC25C.

{ECO:0000269|PubMed:14976552, ECO:0000269|PubMed:15150265, ECO:0000269|PubMed:20026642, ECO:0000269|PubMed:21985311}.

---

Molecular Weight: 85.1 kDa

UniProt: [Q8TDC3](#)

## 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