

Mouse Brsk2 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP16066c**Specification**

Mouse Brsk2 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q69Z98](#)**Mouse Brsk2 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 75770**Other Names**

Serine/threonine-protein kinase BRSK2, Brain-specific serine/threonine-protein kinase 2, BR serine/threonine-protein kinase 2, Serine/threonine-protein kinase SAD-A, Brsk2, Kiaa4256, Sada

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Brsk2 Antibody (Center) Blocking Peptide - Protein Information**Name** Brsk2**Synonyms** Kiaa4256, Sada**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. 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](http://www.uniprot.org/citations/22798068)), BRSK2 phosphorylated at Thr-261 can promote insulin secretion (PubMed:[22669945](http://www.uniprot.org/citations/22669945)). Regulates reorganization of the actin cytoskeleton. May play a role in the apoptotic response triggered by endoplasmic reticulum (ER) stress.

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, perinuclear region. Endoplasmic reticulum. Note=Detected at centrosomes during mitosis. Localizes to the endoplasmic reticulum in response to stress caused by tunicamycin (By similarity)

Tissue Location

Detected in pancreas islets and in brain (at protein level). Detected in brain and pancreas

Mouse Brsk2 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

Mouse Brsk2 Antibody (Center) Blocking Peptide - Images**Mouse Brsk2 Antibody (Center) Blocking Peptide - Background**

Brsk2 is required for the polarization of forebrain neurons which endows axons and dendrites with distinct properties, possibly by locally regulating phosphorylation of microtubule-associated proteins.

Mouse Brsk2 Antibody (Center) Blocking Peptide - References

Muller, M., et al. J. Cell. Sci. 123 (PT 2), 286-294 (2010) :Choi, Y.J., et al. Genes Dev. 22(18):2485-2495(2008)Hezel, A.F., et al. Mol. Cell. Biol. 28(7):2414-2425(2008)Barnes, A.P., et al. Cell 129(3):549-563(2007)Munton, R.P., et al. Mol. Cell Proteomics 6(2):283-293(2007)