

Mouse Brsk2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16066c

Specification

Mouse Brsk2 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q69Z98
Other Accession	D3ZML2 , NP_001009930.1 , NP_083702.1
Reactivity	Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	81733
Antigen Region	329-356

Mouse Brsk2 Antibody (Center) - 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

Target/Specificity

This Mouse Brsk2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 329-356 amino acids from the Central region of mouse Brsk2.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Mouse Brsk2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Brsk2 Antibody (Center) - 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](#)), 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.

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)

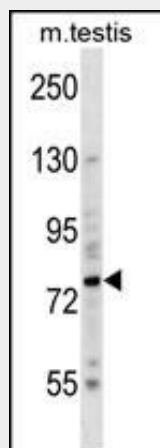
Tissue Location

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

Mouse Brsk2 Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Mouse Brsk2 Antibody (Center) - Images

Mouse Brsk2 Antibody (Center) (Cat. #AP16066c) western blot analysis in mouse testis tissue

lysates (35ug/lane). This demonstrates the Brsk2 antibody detected the Brsk2 protein (arrow).

Mouse Brsk2 Antibody (Center) - 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) - 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)