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www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-401-Z92

BRSK1 Antibody

Overview

Description:	Anti-BRSK1 (RABBIT) Antibody - 600-401-Z92
Item No.:	600-401-Z92
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	BRSK1 was initially identified as a mammalian homolog to the fission yeast S. pombe Cdr2, a mitosis-regulatory kinase and also shows significant homology to the C. elegans neuronal cell polarity regulator SAD1. BRSK1 is ubiquitously expressed, with highest levels of expression in the brain and testes. Similar to its yeast homolog, BRSK1 is thought to be involved in stress-induced cell cycle arrest. Overexpression of this protein leads to the G2/M arrest in HeLa S2 cells and UV-induced G2/M arrest could be partially abrogated by reduced expression of BRSK1 through the use of siRNA, indicating its role in DNA damage checkpoint function. More recently, it has been shown that both BRSK1 and the related protein BRSK2 are required for mammalian neuronal polarization. While BRSK1- and BRSK2-null mice were viable, double-mutant mice died within two hours of birth. Neurons from these mice showed uniformly-sized neurites as opposed to the normal long axon and multiple shorter dendrites. These neurites also displayed both axonal and dendritic markers. At least two isoforms of BRSK1 are known to exist.
Synonyms:	BRSK1 Antibody, hSAD1, KIAA1811, SAD1, SADB, Brain-selective kinase 1, SAD1 homolog
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	BRSK1
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-BRSK1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 28 amino acid synthetic peptide from near the internal region of human BRSK1.
Purity/Specificity:	Anti-BRSK1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with BRSK1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q8TDC3 • GeneID - 84446 • NCBI - NP_115806.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-BRSK1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 85 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000 - 1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	0.5-2 µg/mL

Formulation

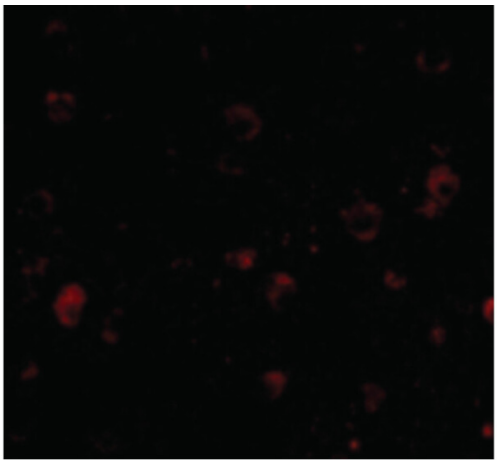
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

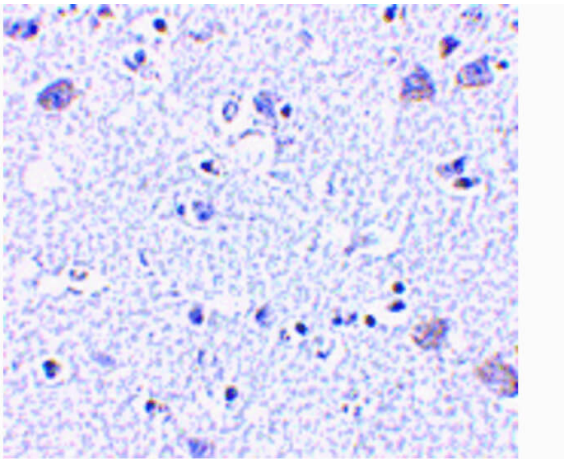
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

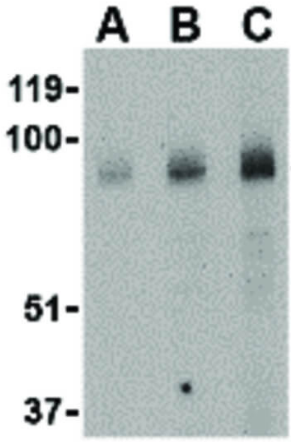
Images



Immunofluorescence Microscopy
Immunofluorescence Microscopy of BRSK1 antibody. Tissue: Human brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: BRSK1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: BRSK1 as red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of BRSK1 antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: BRSK1 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: BRSK1 is nuclear and occasionally cytoplasmic. Staining: BRSK1 as precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot
Western Blot of BRSK1 antibody. Lane A: Human brain tissue lysate at 0.5 µg/mL. Lane B: Human brain tissue lysate at 1 µg/mL. Lane C: Human brain tissue lysate at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.
Predicted/Observed size: 85 kDa, ~85-90 kDa for BRSK1.

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