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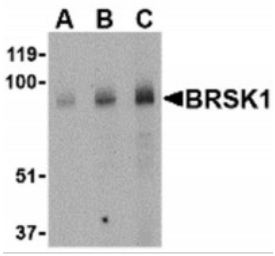
ProSci Incorporated
12170 Flint Place
Poway, CA 92064

Toll Free: +1 (888) 513 9525
Local: +1 (858) 513 2638
Fax: +1 (858) 513 2692

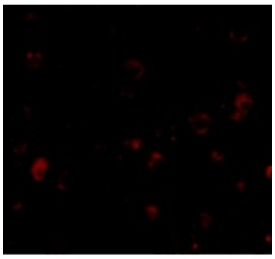
techsupport@prosci-inc.com

BRSK1 Antibody

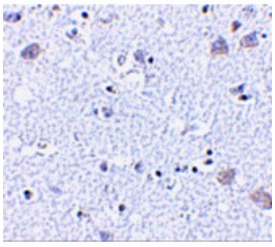
CATALOG NUMBER: 4083



Western blot analysis of BRSK1 in human brain tissue lysate with BRSK1 antibody at (A) 0.5, (B) 1 and (C) 2 ug/mL.



Immunofluorescence of BRSK1 in Human Brain cells with BRSK1 antibody at 20 ug/mL.



Immunohistochemistry of BRSK1 in human brain tissue with BRSK1 antibody at 5 ug/mL.

Specifications

SPECIES REACTIVITY:	Human, Mouse, Rat
TESTED APPLICATIONS:	ELISA, IF, IHC-P, WB
APPLICATIONS:	BRSK1 antibody can be used for detection of BRSK1 by Western blot at 0.5 - 2 ug/mL. Antibody can also be used for immunohistochemistry starting at 5 ug/mL. For immunofluorescence start at 20 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1303 - Human Brain Tissue Lysate
IMMUNOGEN:	BRSK1 antibody was raised against a 28 amino acid synthetic peptide from near the center of human BRSK1. The immunogen is located within amino acids 450 - 500 of BRSK1.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	BRSK1 Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	BRSK1 Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	BRSK1 antibody can be stored at 4˚C for three months and -20˚C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	BRSK1 Antibody: hSAD1, KIAA1811, SAD1, SADB, Brain-selective kinase 1, SAD1 homolog
ACCESSION NO.:	Q8TDC3

PROTEIN GI NO.:	34395684
OFFICIAL SYMBOL:	BRSK1
GENE ID:	84446

Background

BACKGROUND:	BRSK1 Antibody: 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 unbiquitously 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.
REFERENCES:	1) Lu R, Niida H, and Nakanishi M. Human SAD1 kinase is involved in UV-induced DNA damage checkpoint function. J. Biol. Chem.2004; 279:31164-70.
	2) Kishi M, Pan YA, Crump J, et al. Mammalian SAD kinases are required for neuronal polarization. Science2005; 307:929-32.

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December 12, 2016