

BRSK2 antibody (pAb)

Rabbit Anti-Human/Mouse BRSK2

Instruction Manual

Catalog Number	PK-AB718-4085
Synonyms	BRSK2 Antibody: BRSK2, BR serine-threonine kinase 2, serine-threonine protein kinase 29, STK29, PEN11B, SAD1B kinase, SAD-A
Description	BRSK2 was initially identified through a computer screen of the human genome and shows significant homology to the <i>C. elegans</i> neuronal cell polarity regulator SAD1. BRSK2 is expressed in the brain and to a lesser extent in the testes. BRSK2 is a member of the AMP-activated protein kinase subfamily and can be activated by the tumor suppressor kinase LKB1. More recently, it has been shown that both BRSK2 and the related protein BRSK1 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. BRSK2 has also been shown to be an autoantigen in paraneoplastic limbic encephalitis. At least four isoforms of BRSK2 are known to exist.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	BRSK2 antibody was raised in rabbits against a 23 amino acid peptide from near the carboxy terminus of human BRSK2.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C 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.
Applications	E, WB, IHC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. BRSK2 antibody can be used for detection of BRSK2 by Western blot at 0.5 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.
Images	Available upon request.
References	Manning G, Whyte DB, Martinez R, et al. The protein kinase complement of the human genome. <i>Science</i> 2002; 298:1912-34. Lizcano JM, Goransson O, Toth R, et al. LKB1 is a master kinase that activates 13 kinases of the AMPK subfamily, including MARK/PAR-1. <i>EMBO J.</i> 2004; 23:833-43. Kishi M, Pan YA, Crump J, et al. Mammalian SAD kinases are required for neuronal polarization. <i>Science</i> 2005; 307:929-32. Sabater L, Gomez-Choco M, Saiz A, et al. BR serine/threonine kinase 2: A new autoantigen in paraneoplastic limbic encephalitis. <i>J. Neuroimmunol.</i> 2005; 170:186-90.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4085P; BRSK2 Peptide Cat.No. PK-AB718-1303; Human Brain Tissue Lysate

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