

ARG45480 anti-BRSK1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes BRSK1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Specificity	BRSK1
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	BRSK1
Species	Human
Immunogen	Recombinant protein containing to human BRSK1.
Conjugation	Un-conjugated
Alternate Names	BRSK1; BR Serine/Threonine Kinase 1; KIAA1811; SAD-B; Brain-Specific Serine/Threonine-Protein Kinase 1; Synapses Of Amphids Defective Homolog 1; Serine/Threonine-Protein Kinase BRSK1; Serine/Threonine-Protein Kinase SAD-B; BR Serine/Threonine-Protein Kinase 1; Brain-Selective Kinase 1; SAD1 Homolog; EC 2.7.11.1 47; HSAD1; Brain Selective Kinase 1; Protein Kinase SAD1A; EC 2.7.11.26; SAD1 Kinase; EC 2.7.11 47; SAD1; SADB

Application Instructions

Application table	Application	Dilution
	FACS	1 - 3 µg/10 ⁶ cells
	ICC/IF	5 µg/ml
	IHC-P	2-5 µg/ml
	WB	0.1-0.25 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	90 kDa	

Properties

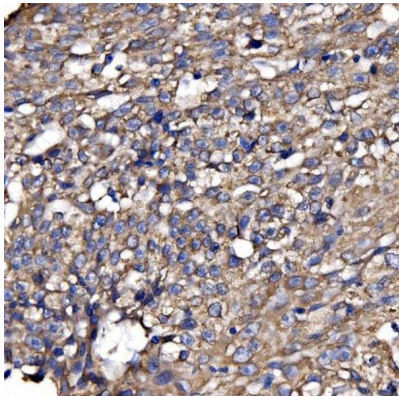
Form	Powder
Purification	Affinity purified
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl and 4% Trehalose.
Stabilizer	4% Trehalose

Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

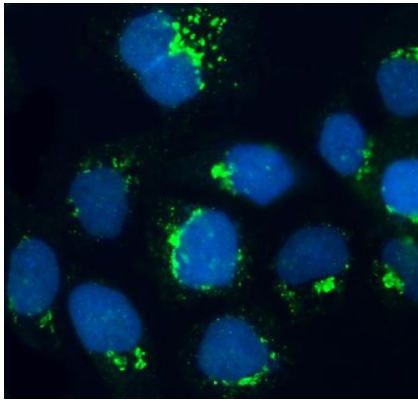
Gene Symbol	BRSK1
Gene Full Name	BR Serine/Threonine Kinase 1
Background	Enables magnesium ion binding activity and tau-protein kinase activity. Involved in mitotic G2 DNA damage checkpoint signaling and protein phosphorylation. Acts upstream of or within G2/M transition of mitotic cell cycle; peptidyl-serine phosphorylation; and response to UV. Located in cell junction; cytoplasm; and nucleoplasm. [provided by Alliance of Genome Resources, Feb 2025]
Function	Serine/threonine-protein kinase that plays a key role in polarization of neurons and centrosome duplication. Phosphorylates CDC25B, CDC25C, MAPT/TAU, RIMS1, TUBG1, TUBG2 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-529' and 'Ser-579'. Also regulates neuron polarization by mediating phosphorylation of WEE1 at 'Ser-642' in postmitotic neurons, leading to down-regulate WEE1 activity in polarized neurons. In neurons, localizes to synaptic vesicles and plays a role in neurotransmitter release, possibly by phosphorylating RIMS1. Also acts as a positive regulator of centrosome duplication by mediating phosphorylation of gamma-tubulin (TUBG1 and TUBG2) at 'Ser-131', leading to translocation of gamma-tubulin and its associated proteins to the centrosome. Involved in the UV-induced DNA damage checkpoint response, probably by inhibiting CDK1 activity through phosphorylation and activation of WEE1, and inhibition of CDC25B and CDC25C. [UniProt]
Calculated Mw	85 kDa
PTM	Methylation; Phosphoprotein. [UniProt]
Cellular Localization	Cell projection; Cytoplasm; Cytoplasmic vesicle; Cytoskeleton; Nucleus; Synapse. [UniProt]

Images



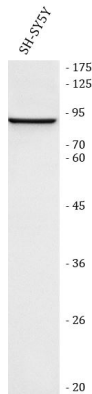
ARG45480 anti-BRSK1 antibody IHC-P image

Immunohistochemistry: Human laryngeal carcinoma stained with ARG45480 anti-BRSK1 antibody at 2 µg/ml dilution.



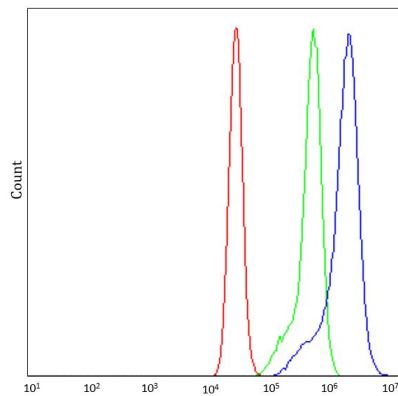
ARG45480 anti-BRSK1 antibody ICC/IF image

Immunofluorescence: A431 stained with ARG45480 anti-BRSK1 antibody at 5 $\mu\text{g}/\text{ml}$ dilution.



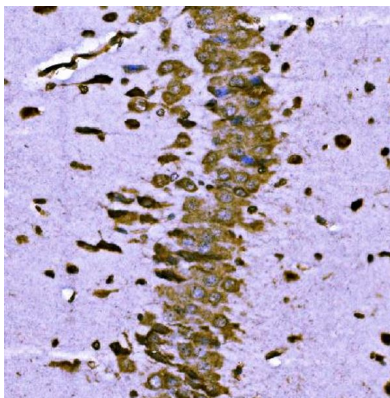
ARG45480 anti-BRSK1 antibody WB image

Western blot: SH-SY5Y stained with ARG45480 anti-BRSK1 antibody at 0.5 $\mu\text{g}/\text{ml}$ dilution.



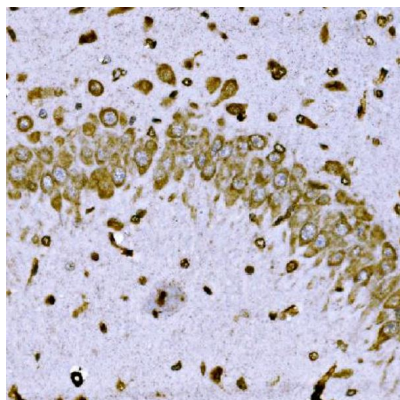
ARG45480 anti-BRSK1 antibody FACS image

Flow Cytometry: CACO-2 stained with ARG45480 anti-BRSK1 antibody at 1 $\mu\text{g}/10^6$ cells dilution.



ARG45480 anti-BRSK1 antibody IHC-P image

Immunohistochemistry: Rat brain stained with ARG45480 anti-BRSK1 antibody at 2 $\mu\text{g}/\text{ml}$ dilution.



ARG45480 anti-BRSK1 antibody IHC-P image

Immunohistochemistry: Mouse brain stained with ARG45480 anti-BRSK1 antibody at 2 µg/ml dilution.