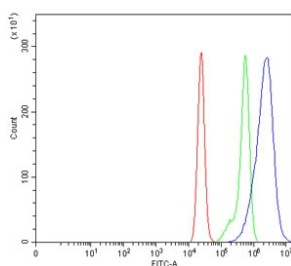


## BRSK2 Antibody / Brain-selective kinase 2 (RQ6712)

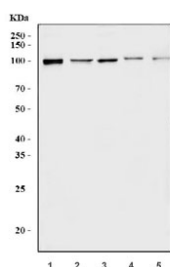
Catalog No.	Formulation	Size
RQ6712	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	Q8IWQ3
<b>Localization</b>	Cytoplasmic
<b>Applications</b>	Western Blot : 1-2ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
<b>Limitations</b>	This BRSK2 antibody is available for research use only.



Flow cytometry testing of human Caco-2 cells with BRSK2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= BRSK2 antibody.



Western blot testing of 1) human Caco-2, 2) human SH-SY5Y, 3) rat testis, 4) mouse brain and 5) mouse testis tissue with BRSK2 antibody. Predicted molecular weight: 69-85 kDa.

## Description

BR serine/threonine-protein kinase 2 is an enzyme that in humans is encoded by the BRSK2 gene. BRSK2 was initially identified through a computer screen of the human genome and shows significant homology to the *C. elegans* 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.

## Application Notes

Optimal dilution of the BRSK2 antibody should be determined by the researcher.

## Immunogen

Recombinant human protein (amino acids M250-P736) was used as the immunogen for the BRSK2 antibody.

## Storage

After reconstitution, the BRSK2 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.