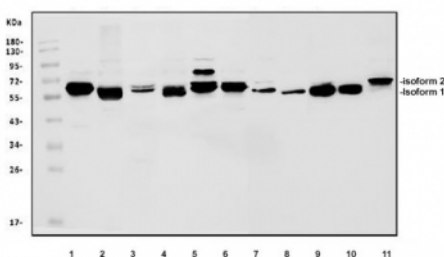


PRKAA1 Antibody / AMPK alpha 1 (RQ6111)

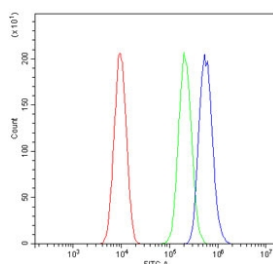
Catalog No.	Formulation	Size
RQ6111	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q13131
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This PRKAA1 antibody is available for research use only.



Western blot testing of 1) human Jurkat, 2) human HeLa, 3) human MCF7, 4) monkey COS-7, 5) human K562, 6) HEK293, 7) rat brain, 8) rat heart, 9) mouse brain, 10) mouse heart and 11) mouse intestine lysate with PRKAA1 antibody. Predicted molecular weight: 64-66 kDa (two isoforms).



Flow cytometry testing of human SiHa cells with PRKAA1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PRKAA1 antibody.

Description

5'-AMP-activated protein kinase catalytic subunit alpha-1 is an enzyme that in humans is encoded by the PRKAA1 gene. The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways.

Application Notes

Optimal dilution of the PRKAA1 antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids D359-P539) was used as the immunogen for the PRKAA1 antibody.

Storage

After reconstitution, the PRKAA1 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.