

Anti-PRKAA2 Antibody

Catalog Number: M01420

About PRKAA2

The protein encoded by this gene is a catalytic subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. Studies of the mouse counterpart suggest that this catalytic subunit may control whole-body insulin sensitivity and is necessary for maintaining myocardial energy homeostasis during ischemia.

Overview

Product Name	Anti-PRKAA2 Antibody
Reactive Species	Human
Description	Boster Bio Anti-PRKAA2 Antibody (Catalog # M01420). Tested in IF, WB application(s). This antibody reacts with Human.
Application	IF, WB
Clonality	Monoclonal 206CT5.4.2
Formulation	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Storage Instructions	Maintain refrigerated at 2-8°C for up to 2 weeks. For long-term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.
Host	Mouse
Uniprot ID	P54646

Technical Details

Immunogen	This PRKAA2 monoclonal antibody is generated from mouse immunized with PRKAA2 recombinant protein.
Predicted Reactive Species	Bovine, Chicken, Horse, Monkey, Pig, Sheep, Xenopus
Isotype	IgG2a,K
Purification	This antibody is purified through a protein G column, followed by dialysis against PBS.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

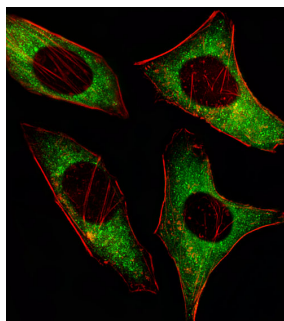
Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

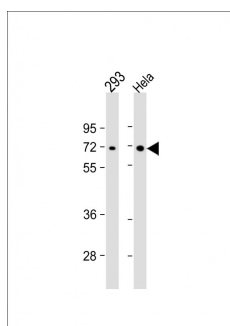
IF: 1:10-1:50

WB: 1:1000

Anti-PRKAA2 Antibody (M01420) Images



Fluorescent image of HeLa cell stained with PRKAA2 Antibody. HeLa cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with PRKAA2 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-mouse antibody (green) was used (1:400, 50 min at 37°C). Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7 units/ml, 1 h at 37°C). PRKAA2 immunoreactivity is localized to Cytoplasm significantly.



All lanes : Anti-PRKAA2 Antibody at 1:1000 dilution

Lane 1: 293 whole cell lysate

Lane 2: HeLa whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.

Predicted band size : 62 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

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