

Mouse anti-Human PRKAA2 Monoclonal Antibody | anti-PRKAA2 antibody

PRKAA2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA283480	Mouse	Human	Immunofluorescence, ELISA, Western Blot

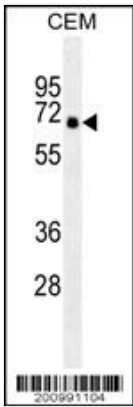
PRODUCT SYNONYMS

PRKAA2; Monoclonal Antibody; PRKAA2 Antibody; 5'-AMP-activated protein kinase catalytic subunit alpha-2; AMPK subunit alpha-2; Acetyl-CoA carboxylase kinase; ACACA kinase; Hydroxymethylglutaryl-CoA reductase kinase; HMGCR kinase; AMPK; AMPK2; anti-PRKAA2 antibody

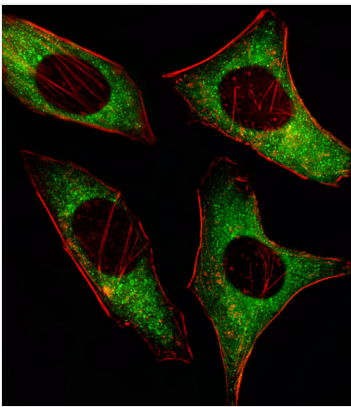
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2a,K
Clone Number	206CT5.4.2
Specificity	This PRKAA2 monoclonal antibody is generated from mouse immunized with PRKAA2 recombinant protein.
Form/Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Concentration	Vial Concentration: 0.5 (varies by lot)
Sequence Length	552
Applicable Applications for anti-PRKAA2 antibody	IF (Immunofluorescence), ELISA, WB (Western Blot)
Antigen Type	Recombinant Protein
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)
PRKAA2 antibody western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the PRKAA2 antibody detected the PRKAA2 protein (arrow).



IF (Immunofluorescence)
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 degree). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-mouse antibody (green) was used (1:400, 50 min at 37 degree). Cytoplasmic actin was counterstained with Alexa Fluor 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37 degree). PRKAA2 immunoreactivity is localized to Cytoplasm significantly.

ADDITIONAL INFORMATION

Related Product Information for anti-PRKAA2 antibody	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.
Product Categories/Family for anti-PRKAA2 antibody	Cancer; Cardiovascular; Metabolism; Neuroscience; Signal transduction
References	Jablonski, K.A., et al. Diabetes 59(10):2672-2681(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Jassim, G., et al. Pharmacopsychiatry (2010) In press : Bungard, D., et al. Science 329(5996):1201-1205(2010) Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)

NCBI AND UNIPROT INFORMATION

NCBI GI #	46877068
NCBI GeneID	5563
NCBI Accession #	NP_006243.2
NCBI GenBank Nucleotide #	NM_006252.3
UniProt Accession #	P54646; Q9H1E8; Q9UD43; AAB32732
Molecular Weight	62320
NCBI Official Full Name	5'-AMP-activated protein kinase catalytic subunit alpha-2
NCBI Official Synonym Full Names	protein kinase, AMP-activated, alpha 2 catalytic subunit

NCBI Official Symbol	PRKAA2
NCBI Official Synonym Symbols	AMPK; AMPK2; PRKAA; AMPKa2
NCBI Protein Information	5'-AMP-activated protein kinase catalytic subunit alpha-2
UniProt Protein Name	5'-AMP-activated protein kinase catalytic subunit alpha-2
UniProt Gene Name	PRKAA2
UniProt Synonym Gene Names	AMPK; AMPK2; AMPK subunit alpha-2; ACACA kinase; HMGCR kinase
UniProt Entry Name	AAPK2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/monoclonal/prkaa2-antibody-clone-206ct5-4-2-immunofluorescence-western-blot-elisa/283480>