

PRKAG3 mouse monoclonal antibody (hybridoma)

Catalog # H00053632-M

Size Up to 5 Clones

Specification

Product Description	Mouse monoclonal antibody raised against a full-length recombinant PRKAG3.
Immunogen	PRKAG3 (NP_059127.2, 1 a.a. ~ 489 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MEPGLEHALRRTPSWSSLGGSEHQEMSFLEQENSSSWPSPAVTSSSERIRGKRRAKALRWTRQ KSVEEGEPGQGEGPRSRPAAESTGLEATFPKTTPLAQADPAGVGTPPTGWDCLPSDCTASAA GSSTDDVELATEFPATEAWECELEGLLEERPALCLSPQAPFPKLGWDELKPKGAQIMRFMQ EHTCYDAMATSSKLVIFDTMLEIKKAFFALVANGVRAAPLWDSKKQSFVGMLTTIDFILVLHRYRS PLVQIYEIEQHKIETWREYLQGC FKPLVSISPNDSLFEAVYTLIKNRIHRLPVLDPVSGNVLHILTHKR LLKFLHIFGSLLPRPSFLYRTIQDLGIGTFRDLAVVLETAPILTALDIFVDRRVSALPVVNECGQVVGL YSRFDVIHLAAQQTYNHLDMSVGGEALRQRTLCEGLVLSQCPHESLGEVIDRIAREQVHRLVLVDET QHLLGVVSLSDILQALVLSPAGIDALGA
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (84); Rat (82)
Quality Control Testing	Antibody reactivity and specificity confirmed by ELISA and Western Blot.
Deliverables	Up to 5 positive hybridoma clones will be delivered to customer in the cryotube format.
Note	Customer should check the viability of the hybridomas within one month from the date of receipt. Fee -for-service of long term hybridoma storage can be performed upon customer's request.

Applications

- Western Blot (Transfected lysate)

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- ELISA

Gene Info — PRKAG3

Entrez GeneID [53632](#)

GeneBank Accession# [NM_017431.2](#)

Protein Accession# [NP_059127.2](#)

Gene Name PRKAG3

Gene Alias AMPKG3

Gene Description protein kinase, AMP-activated, gamma 3 non-catalytic subunit

Omim ID [604976](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is a regulatory 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. This subunit is one of the gamma regulatory subunits of AMPK. It is dominantly expressed in skeletal muscle. Studies of the pig counterpart suggest that this subunit may play a key role in the regulation of energy metabolism in skeletal muscle. [provided by RefSeq]

Other Designations

5'-AMP-activated protein kinase, gamma-3 subunit|AMP-activated protein kinase, non-catalytic gamma-3 subunit|AMPK gamma-3 chain|OTTHUMP00000164095

Pathway

- [Adipocytokine signaling pathway](#)
- [Hypertrophic cardiomyopathy \(HCM\)](#)
- [Insulin signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Atherosclerosis](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Coronary Artery Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Drug Toxicity](#)
- [Edema](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Osteoporosis](#)