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PRKAB2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant PRKAB2.
Catalog # AT3429a

Specification

PRKAB2 Antibody (monoclonal) (M01) - Product Information

Application	**WB, E**
Primary Accession	O43741
Other Accession	BC053610
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG2b kappa**
Calculated MW	**30302**

PRKAB2 Antibody (monoclonal) (M01) - Additional Information

Gene ID 5565

Other Names
5'-AMP-activated protein kinase subunit beta-2, AMPK subunit beta-2, PRKAB2

Target/Specificity
PRKAB2 (AAH53610, 1 a.a. ~ 272 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution
WB~~1:500~1000

Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
PRKAB2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

PRKAB2 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

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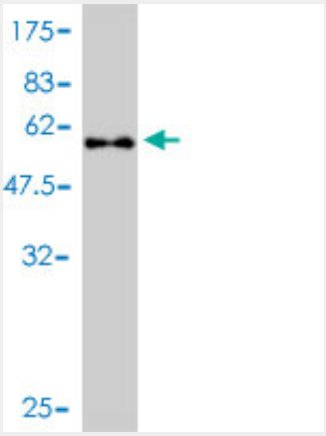
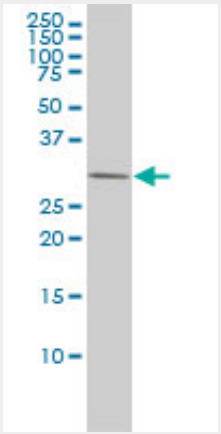
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

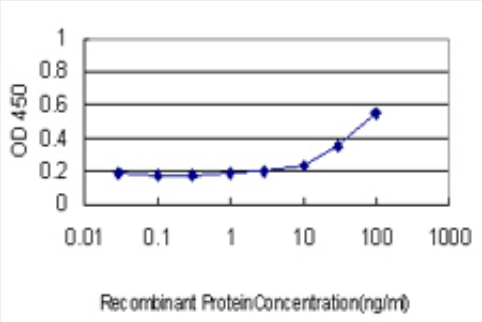
PRKAB2 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (55.66 KDa) .



PRKAB2 monoclonal antibody (M01), clone 2G9 Western Blot analysis of PRKAB2 expression in Hela ((Cat # AT3429a)



Detection limit for recombinant GST tagged PRKAB2 is approximately 10ng/ml as a capture antibody.

PRKAB2 Antibody (monoclonal) (M01) - Background

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 may be a positive regulator of AMPK activity. It is highly expressed in skeletal muscle and thus may have tissue-specific roles.

PRKAB2 Antibody (monoclonal) (M01) - References

COMMON VARIANTS IN 40 GENES ASSESSED FOR DIABETES INCIDENCE AND RESPONSE TO METFORMIN AND LIFESTYLE INTERVENTIONS IN THE DIABETES PREVENTION PROGRAM. Jablonski KA, et al. Diabetes, 2010 Aug 3. PMID 20682687.Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.Integrative predictive model of coronary artery calcification in atherosclerosis. McGeachie M, et al. Circulation, 2009 Dec 15. PMID 19948975.Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.Purification and characterization of truncated human AMPK alpha 2 beta 2 gamma 3 heterotrimer from baculovirus-infected insect cells. Ramanathan L, et al. Protein Expr Purif, 2010 Mar. PMID 19836452.