

Product Name: KD-Validated PRKAG1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA01415

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000
Molecular Weight	Calculated MW: 37.6kDa

Antigen Information

Gene Name	PRKAG1
Alternative Names	PRKAG1; Protein Kinase AMP-Activated Non-Catalytic Subunit Gamma 1; Protein Kinase, AMP-Activated, Gamma 1 Non-Catalytic Subunit; 5'-AMP-Activated Protein Kinase Subunit Gamma-1; AMPK Gamma1; 5'-AMP-Activated Protein Kinase, Gamma-1 Subunit; AMPK Subunit Gamma-1; AMPK Gamma-1 Chain; AMPKG; AMPKg
Gene ID	5571.0
SwissProt ID	P54619
Immunogen	A synthesized peptide derived from human AMPK gamma 1

Background

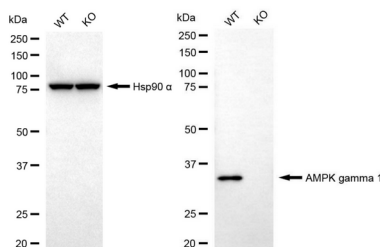
The protein encoded by this gene is a regulatory subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer

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 is one of the gamma regulatory subunits of AMPK. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]

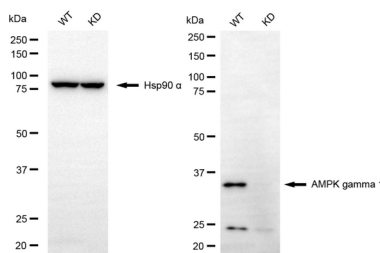
Research Area

Cardiovascular,Signal Transduction,Cancer,Metabolism

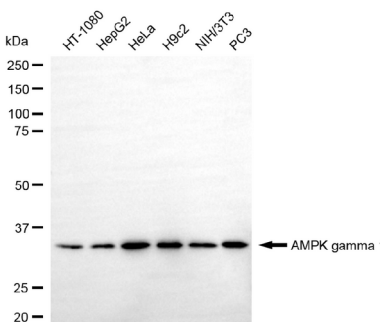
Image Data



Western blotting analysis using AMPK gamma 1 antibody (KVA01415). AMPK gamma 1 expression in wild type (WT) and PRKAG1 knockout (KO) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with AMPK gamma 1 antibody (KVA01415, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using AMPK gamma 1 antibody (KVA01415). AMPK gamma 1 expression in wild-type (WT) and PRKAG1 knockdown (KD) HSHC cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with AMPK gamma 1 antibody (KVA01415, 1:2,500) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using AMPK gamma 1 antibody (KVA01415). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with AMPK gamma 1 antibody (KVA01415, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.