

[KO Validated] AMPK α 2 Rabbit pAb

Catalog No.: A7339 **KO Validated**

Basic Information

Catalog No.

A7339

Observed MW

62kDa

Calculated MW

62kDa

Category

Primary antibody

Applications

WB, IF, IP

Cross-Reactivity

Human, Mouse, Rat

Recommended Dilutions

WB	1:500 - 1:2000
IF	1:50 - 1:200
IP	1:50 - 1:200

Contact

 | www.abclonal.com

Background

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.

Immunogen Information

Gene ID	Swiss Prot
5563	P54646

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 343-552 of human AMPK α 2 (NP_006243.2).

SynonymsPRKAA2;AMPK;AMPK2;AMPK α 2;PRKAA

Product Information

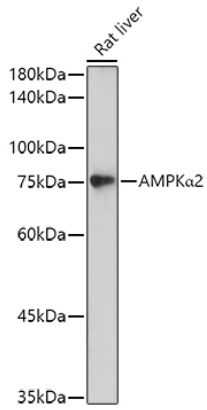
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

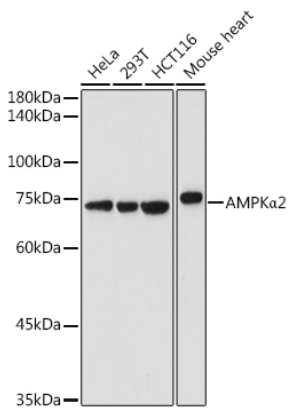
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

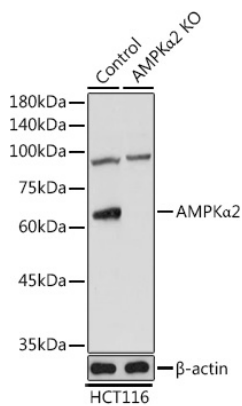
Validation Data



Western blot analysis of extracts of Rat liver, using AMPKα2 antibody (A7339) at 1:500 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25ug per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 180s.

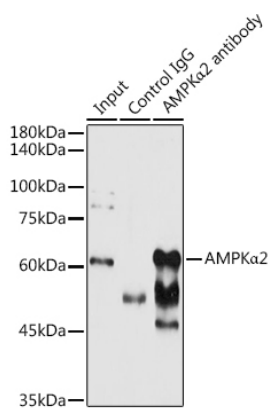


Western blot analysis of extracts of various cell lines, using AMPKα2 antibody (A7339) at 1:500 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25ug per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 30s.

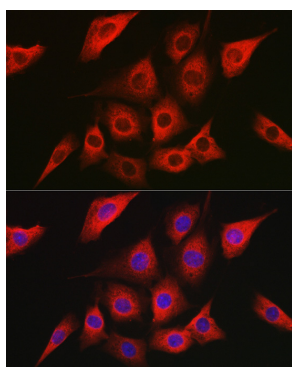


Western blot analysis of extracts from normal (control) and AMPKα2 Rabbit pAb knockout (KO) HCT116 cells, using AMPKα2 Rabbit pAb antibody (A7339) at 1:1000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25ug per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60s.

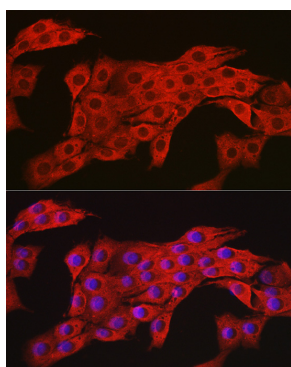
Validation Data



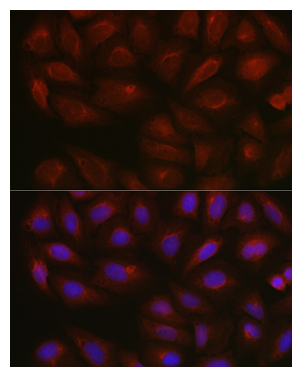
Immunoprecipitation analysis of 600ug extracts of Mouse heart using 3ug AMPKα2 antibody (A7339). Western blot was performed from the immunoprecipitate using AMPKα2 antibody (A7339) at a dilution of 1:500.



Immunofluorescence analysis of NIH/3T3 cells using [KO Validated] AMPKα2 Rabbit pAb (A7339) at dilution of 1:150 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC-12 cells using [KO Validated] AMPKα2 Rabbit pAb (A7339) at dilution of 1:150 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U2OS cells using [KO Validated] AMPKα2 Rabbit pAb (A7339) at dilution of 1:150 (40x lens). Blue: DAPI for nuclear staining.