A14052

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AMPKα2 Rabbit pAb

Catalog No.: A14052 1 Publications

Basic Information

Observed MW
62kDa

Calculated MW
62kDa

Category
Polyclonal Antibody

Applications
WB,IF/ICC,ELISA

Cross-Reactivity
Human,Mouse,Rat

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.

Recommended Dilutions

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
5563

Swiss Prot
P54646

Immunogen
Recombinant protein (or fragment).This information is considered to be commercially sensitive.

Synonyms
AMPK; AMPK2; PRKAA; AMPKa2; AMPKα2

Contact

www.abclonal.com

Product Information

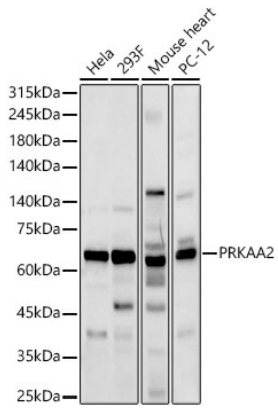
Source
Rabbit

Isotype
IgG

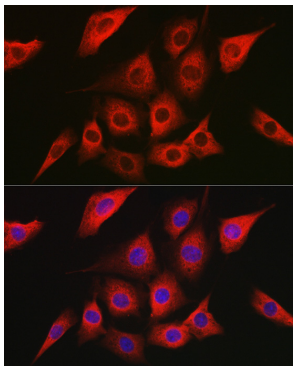
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

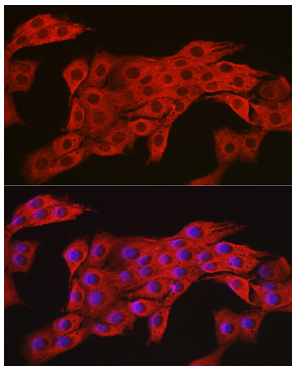
Validation Data



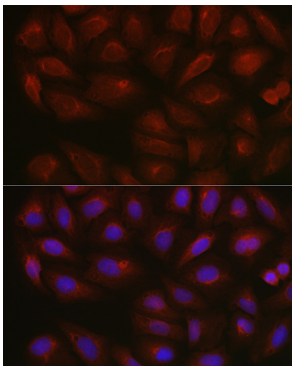
Western blot analysis of various lysates, using AMPKα2 Rabbit pAb (A14052) at 1:900 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.



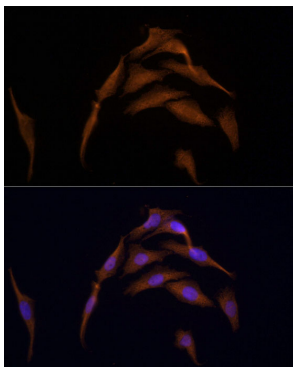
Immunofluorescence analysis of NIH/3T3 cells using AMPKα2 Rabbit pAb (A14052) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



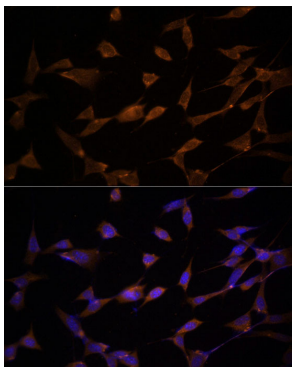
Immunofluorescence analysis of PC-12 cells using AMPKα2 Rabbit pAb (A14052) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U2OS cells using AMPKα2 Rabbit pAb (A14052) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using AMPKα2 Rabbit pAb (A14052) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using AMPKα2 Rabbit pAb (A14052) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.