

Anti-AMPK alpha 1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

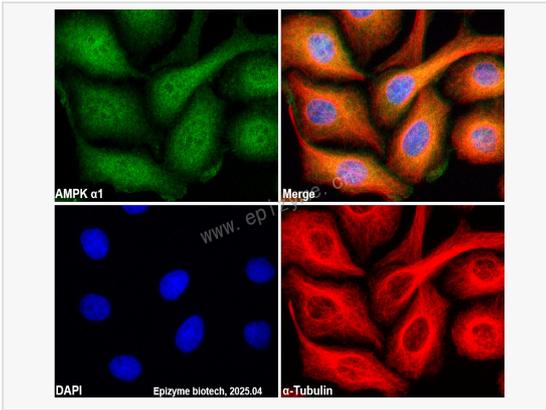
Catalog # R015094

Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human
Dilution	WB 1:1,000~1:5,000; IHC-P 1:100~1:200; IF 1:200~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	69N02G52
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human AMPK alpha 1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-AMPK alpha 1 Rabbit mAb [69N02G52] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	5 AMP activated protein kinase alpha 1 catalytic subunit, 5 AMP activated protein kinase catalytic alpha 1 chain, 5' AMP activated protein kinase catalytic subunit alpha 1, 5'-AMP-activated protein kinase catalytic subunit alpha-1, AAPK1, AAPK1_HUMAN, ACACA kinase, acetyl CoA carboxylase kinase, AI194361, AI450832, AL024255, AMP -activate kinase alpha 1 subunit, AMP-activate kinase alpha 1 subunit, AMP-activated protein kinase, catalytic, alpha -1, AMPK 1, AMPK alpha 1, AMPK alpha 1 chain, AMPK, AMPK subunit alpha 1, AMPK subunit alpha-1, AMPK1, AMPKa1, AMPKalpha1, C130083N04Rik, cb116, EC 2.7.11.1, HMG CoA reductase kinase, HMGCR kinase, hormone sensitive lipase kinase, Hydroxymethylglutaryl CoA reductase kinase, im:7154392, kinase AMPK alpha1, MGC33776, MGC57364, OTTHUMP00000161795, OTTHUMP00000161796, PRKAA 1, PRKAA1, Protein kinase AMP activated alpha 1 catalytic subunit, SNF1-like protein AMPK, SNF1A, Tau protein kinase PRKAA1, wu:fa94c10.
Calculated MW	Calculated MW: 64 kDa; Observed MW: 64 kDa
Uniprot ID	Q13131
Gene ID	5562
Background	The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]



Immunofluorescence - Anti-AMPK alpha 1 Rabbit mAb [69N02G52]

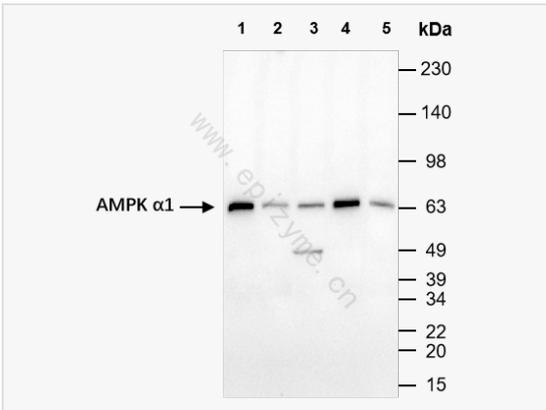
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R015094 at 1:100 dilution and α -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Western Blot - Anti-AMPK alpha 1 Rabbit mAb [69N02G52]

All lanes: R015094 at 1:2,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: A431 (Human epidermoid teratoma cell line) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: T24 (Human bladder cancer epithelial cell) whole cell lysates

Lane 5: 293T (Human embryonic kidney cell) whole cell lysates

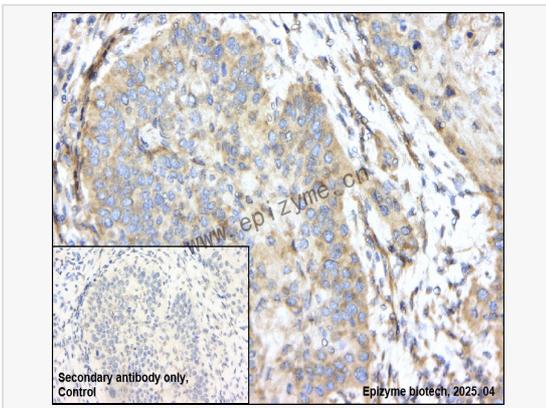
Lysates/proteins at 10 μ g per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 64 kDa

Observed band size: 64 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-AMPK alpha 1 Rabbit mAb [69N02G52]

Sample: Paraformaldehyde-fixed, paraffin embedded human lung cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

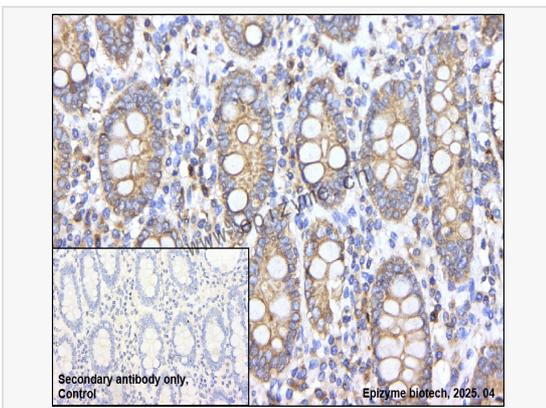
Primary antibody: R015094 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-AMPK alpha 1 Rabbit mAb [69N02G52]

Sample: Paraformaldehyde-fixed, paraffin embedded human gastric cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R015094 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.