A4344

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AMPKβ1 Rabbit mAb

Catalog No.: A4344 Recombinant 1 Publications

Basic Information

Observed MW
38kDa

Calculated MW
30kDa

Category
SMab Recombinant Monoclonal Antibody

Applications
WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity
Human,Mouse,Rat

CloneNo number
ARC1061

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. The myristoylation and phosphorylation of this subunit have been shown to affect the enzyme activity and cellular localization of AMPK. This subunit may also serve as an adaptor molecule mediating the association of the AMPK complex.

Recommended Dilutions

WB	1:500 - 1:1000
IHC-P	1:50 - 1:200
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
5564

Swiss Prot
Q9Y478

Immunogen
Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms
AMPK; HAMPKb; AMPKβ1

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.

Contact

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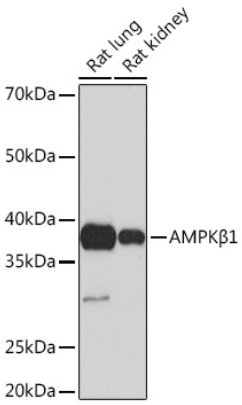
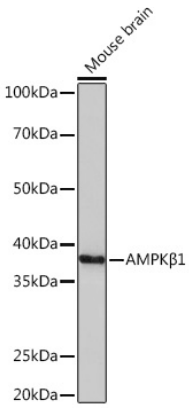
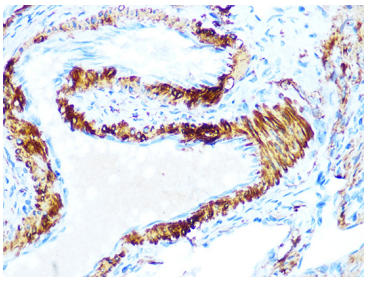
Validation Data



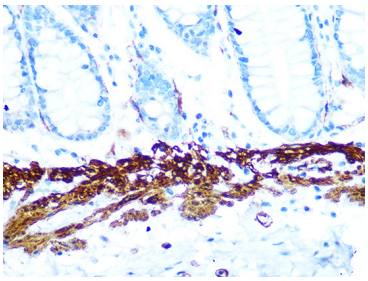
Western blot analysis of various lysates using AMPKβ1 Rabbit mAb (A4344) at 1:1000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60s.



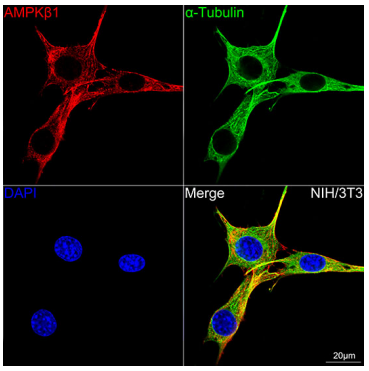
Western blot analysis of lysates from Mouse brain, using AMPKβ1 Rabbit mAb (A4344) at 1:1000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 3min.



Immunohistochemistry analysis of paraffin-embedded Rat ovary using AMPKβ1 Rabbit mAb (A4344) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.

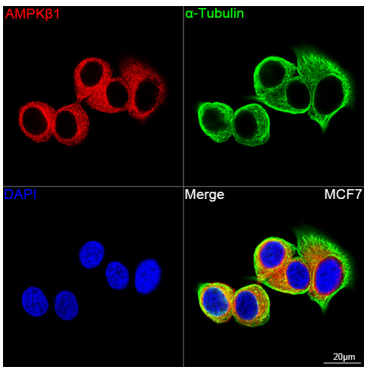


Immunohistochemistry analysis of paraffin-embedded Human colon using AMPKβ1 Rabbit mAb (A4344) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Confocal imaging of NIH/3T3 cells using AMPKβ1 Rabbit mAb (A4344,dilution 1:100)(Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012,dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.

Validation Data



Confocal imaging of MCF7 cells using AMPKβ1 Rabbit mAb (A4344,dilution 1:100)(Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012,dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.