

Rabbit Phospho-AMPK1 (Ser486) Polyclonal Antibody | anti-AMPK1 antibody

Phospho-AMPK1 (Ser486) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31070	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Immunofluorescence

PRODUCT SYNONYMS

Phospho-AMPK1 (Ser486); Polyclonal Antibody; Phospho-AMPK1 (Ser486) Antibody; 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-activated protein kinase; catalytic; alpha-1; AMPK 1; AMPK alpha 1; AMPK alpha 1 chain; AMPK; 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; anti-AMPK1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Form/Format	Phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	~1mg/ml (varies by lot)
Applicable Applications for anti-AMPK1 antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence)
Application Notes	WB: 1:500-1:2000 IHC: 1:50-1:200 IF/ICC: 1:100-1:500 *The optimal dilutions should be determined by the end user.
Immunogen	A synthesized peptide derived from human AMPK alpha 1 around the phosphorylation site of Ser486.
Purification	The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Preparation and Storage	Store at -20 °C. Stable for 12 months from date of receipt.

IMAGES



Application Data

The involvement of AMPK and Akt in the negative regulation of mTOR by APPL1 in STZ-induced diabetic rats. The variations of p-AMPK and p-Akt in normal control rats with vacant lentiviral vector control, normal control rats with APPL1 knockdown, PDN rats, and PDN rats with APPL1 knockdown, and PDN rats with APPL1 overexpression. The abbreviations for the groups of negative control, normal control + shRNA encoding APPL1, painful diabetic neuropathy (PDN), PDN + shRNA encoding APPL1 (shRNA) and PDN + APPL1 genetic overexpression are shown as CON, CON + shRNA, PDN, PDN + shRNA, and PDN + OXP. (n = 4, *P < 0.05 vs. NC group, # P < 0.05 vs. PDN group). Data are expressed as the means ± SEM.



ELISA (Peptide-ELISA)

peptide-ELISA analysis of AAA31070 showing specificity to antigen peptide. Peptides concentration: 1 µg/ml. P-peptide: phospho-peptide. N-peptide: non-phospho-peptide.



IF (Immunofluorescence)

AAA31070 staining HepG2 cells (4h of LPS treatment) by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab (AAA31070 1:200) and mouse anti-beta tubulin Ab (1:200) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG (H+L) Ab (Red) and an AlexaFluor488 conjugated goat anti-mouse IgG (H+L) Ab (Green) were used as the secondary antibody. The nuclear counter stain is DAPI (blue).



IHC (Immunohistochemistry)

AAA31070 at 1/100 staining Rat ovary tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

AAA31070 at 1/100 staining Mouse kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

AAA31070 at 1/200 staining human colon cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-AMPK1 antibody	AMPKα1 a protein kinase of the CAMKII family that plays a central role in regulating cellular and organismal energy balance in response to the balance between AMP/ATP, and intracellular Ca ²⁺ levels.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	94557301
NCBI GeneID	5562
NCBI Accession #	NP_006242.5
NCBI GenBank Nucleotide #	NM_006251.5
UniProt Accession #	Q13131; O00286; Q5D0E1; Q86VS1; Q9UNQ4; A8MTQ6; B2R7E1
Molecular Weight	62kDa, 70 kDa
NCBI Official Full Name	5'-AMP-activated protein kinase catalytic subunit alpha-1 isoform 1
NCBI Official Synonym Full Names	protein kinase AMP-activated catalytic subunit alpha 1
NCBI Official Symbol	PRKAA1
NCBI Official Synonym Symbols	AMPK; AMPKα1

NCBI Protein Information	5'-AMP-activated protein kinase catalytic subunit alpha-1
UniProt Protein Name	5'-AMP-activated protein kinase catalytic subunit alpha-1
UniProt Gene Name	PRKAA1
UniProt Synonym Gene Names	AMPK1; AMPK subunit alpha-1; ACACA kinase; HMGCR kinase

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/phospho-ampk1-ser486-antibody-western-blot-immunohistochemistry-immunofluorescence-elisa/31070>