

AMPK alpha 1 Polyclonal Antibody

Description

Product type Primary Antibody

Code BT-AP06234

Host Rabbit

Isotype IgG

Size 20ul, 50ul, 100ul

Immunogen The antiserum was produced against synthesized peptide derived from human AMPK1. AA range:451-500

Mol wt 62808

Species reactivity Human, Mouse, Rat

Clonality Polyclonal

Recommended application WB, IHC-p, IF, ICC, ELISA

Concentration 1 mg/ml

Full name 5'-AMP-activated protein kinase catalytic subunit alpha-1

Synonyms 5'-AMP-activated protein kinase catalytic subunit alpha-1; PRKAA1; AMPK1; 5'-AMP-activated protein

kinase catalytic subunit alpha-1; AMPK subunit alpha-1; Acetyl-CoA carboxylase kinase; ACACA kinase;

Hydroxymethylglutaryl-CoA reductase kinase; HMGCR kinase; Tau-protein kinase PRKAA1

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

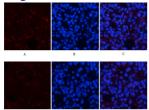
The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the 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.

Recommended Dilution

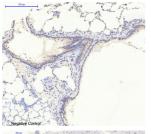
WB: 1: 500 - 1: 2000 IHC-p: 1: 100 - 1: 300 IF: 1: 200 - 1: 1000 ICC: 1: 200 - 1: 1000 ELISA: 1: 10000

Not yet tested in other applications.

Images



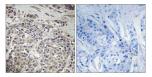
Immunofluorescence analysis of rat-lung tissue. 1,AMPKα1 Polyclonal Antibody(Red) was diluted at 1:200(4°C overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B Immunofluorescence analysis of rat-lung tissue. 1,AMPKα1 Polyclonal Antibody(Red) was diluted at 1:200(4°C overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



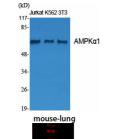
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,AMPK α 1 Polyclonal Antibody was diluted at 1:200(4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



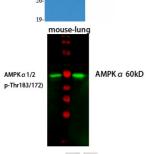
Immunohistochemical analysis of paraffin-embedded Rat-brain tissue. 1,AMPK α 1 Polyclonal Antibody was diluted at 1:200(4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



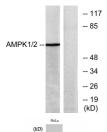
 $Immun ohistochemistry\ analysis\ of\ paraffin-embedded\ human\ brain,\ using\ FAK\ (Phospho-Tyr397)$ Antibody. The picture on the right is blocked with the phospho peptide.



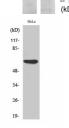
Western Blot analysis of mouse-lung cells using primary antibody diluted at $1:1000(4^{\circ}\text{C}\text{ overnight})$. Secondary antibody:Goat Anti-rabbit IgG IRDye 800(diluted at $1:5000, 25^{\circ}\text{C}, 1 \text{ hour}$).



Western Blot analysis of various cells using AMPKα1 Polyclonal Antibody diluted at 1:1000



Western Blot analysis of HeLa cells using AMPK $\alpha 1$ Polyclonal Antibody diluted at 1:1000 $\,$



Western blot analysis of lysates from HT29 cells, using AMPK1 Antibody. The lane on the right is blocked with the synthesized peptide.

Storage

-20°C for 1 year