

## AMPK alpha 1 Polyclonal Antibody

### Description

<b>Product type</b>	Primary Antibody
<b>Code</b>	BT-AP06234
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Size</b>	20ul, 50ul, 100ul
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human AMPK1. AA range:451-500
<b>Mol wt</b>	62808
<b>Species reactivity</b>	Human, Mouse, Rat
<b>Clonality</b>	Polyclonal
<b>Recommended application</b>	WB, IHC-p, IF, ICC, ELISA
<b>Concentration</b>	1 mg/ml
<b>Full name</b>	5'-AMP-activated protein kinase catalytic subunit alpha-1
<b>Synonyms</b>	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

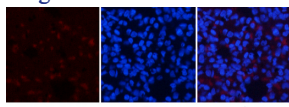
IF: 1: 200 - 1: 1000

ICC: 1: 200 - 1: 1000

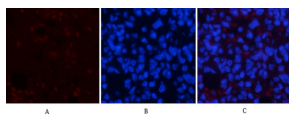
ELISA: 1: 10000

Not yet tested in other applications.

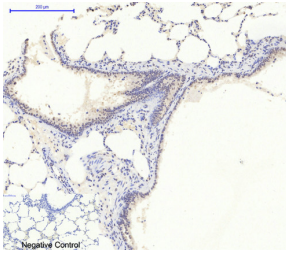
### Images



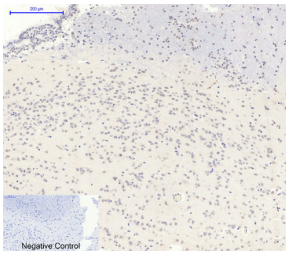
Immunofluorescence analysis of rat-lung tissue. 1,AMPK $\alpha$ 1 Polyclonal Antibody(Red) was diluted at 1:200(4°C overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min),3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



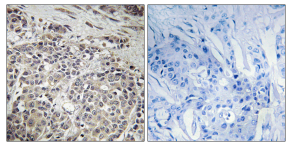
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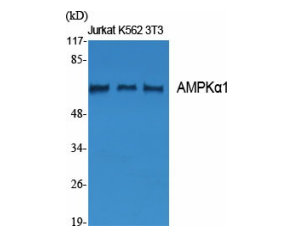
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,AMPK $\alpha$ 1 Polyclonal Antibody was diluted at 1:200(4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was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



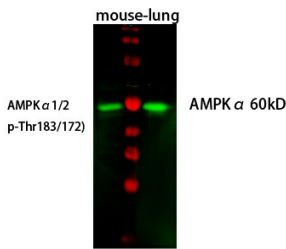
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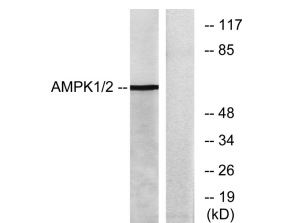
Immunohistochemistry analysis of paraffin-embedded human brain, using FAK (Phospho-Tyr397) Antibody. The picture on the right is blocked with the phospho peptide.



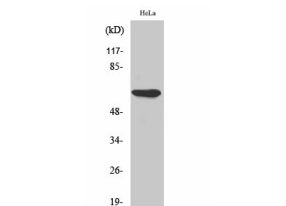
Western Blot analysis of mouse-lung cells using primary antibody diluted at 1:1000(4°C overnight). Secondary antibody:Goat Anti-rabbit IgG IRDye 800( diluted at 1:5000, 25°C, 1 hour).



Western Blot analysis of various cells using AMPK $\alpha$ 1 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

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