

## Basic Information

Product Name	Anti-AMPK Alpha 1/PRKAA1 Antibody (Clone#CDD-16)	
Gene Name	PRKAA1	
Source	Rabbit	
Clonality	Monoclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, IP, FCM	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
Immunogen	A synthesized peptide derived from human AMPK alpha 1	
Concentration	500 ug/ml	
Purification	Affinity-chromatography	
Observed MW	64 kDa	
Dilution Ratios	Western blot (WB): Immunohistochemistry (IHC): Immunocytochemistry/Immunofluorescence (ICC/IF): ImmunoPrecipitation (IP): Flow Cytometry (FCM):	1:500-2000 1:50-200 1:50-200 1:20 1:20

## Storage

12 months from date of receipt, -20°C as supplied.

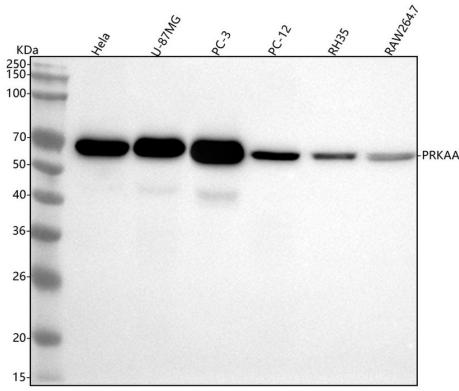
## Background Information

5'-AMP-activated protein kinase catalytic subunit alpha-1 is an enzyme that in humans is encoded by the PRKAA1 gene. 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.

## Reference

Anti-AMPK Alpha 1/PRKAA1 Antibody (Clone#CDD-16)被引用在12文献中。

## Selected Validation Data



Western blot analysis of anti-AMPK Alpha 1/PRKAA1 antibody (BM4202). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human U-87 MG whole cell lysates,

Lane 3: human PC-3 whole cell lysates,

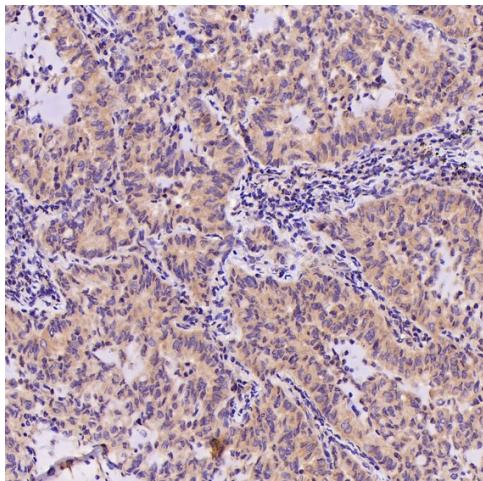
Lane 4: rat PC-12 whole cell lysates,

Lane 5: rat RH-35 whole cell lysates,

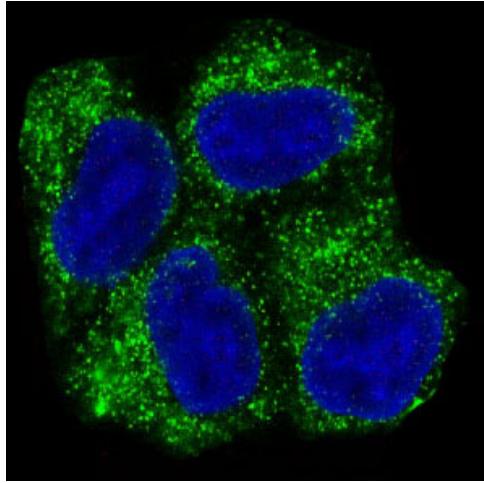
Lane 6: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-AMPK Alpha 1/PRKAA1 antigen affinity purified monoclonal antibody (BM4202) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for AMPK Alpha 1/PRKAA1 at approximately 64 kDa. The expected band size for AMPK Alpha 1/PRKAA1 is at 64 kDa.



Immunohistochemical analysis of paraffin-embedded Human lung adenocarcinoma, using the Antibody.



Immunofluorescent analysis of HeLa cells, using AMPK alpha 1 Antibody.