Anti-AMPK alpha 1 Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P101074

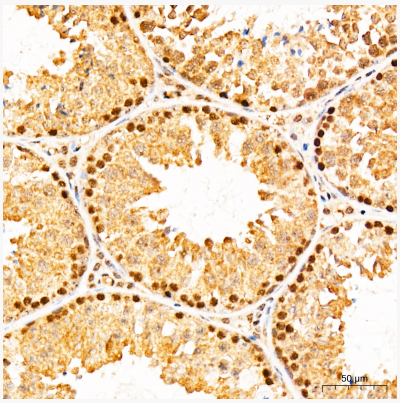
Product Information

Application	WB, IHC-P, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1000~1:5000; IHC-P 1:100~1:500; IF 1:50~1:200
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 381-520 of human AMPKα1 (NP_006242.5).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-AMPK alpha 1 Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

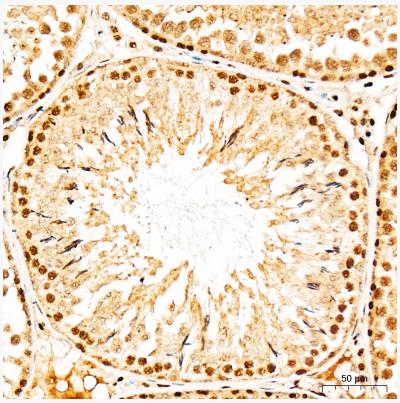
Protein Information

Synonyms	AMPK; AMPKa1; AMPK alpha 1; AMPKα1.
Calculated MW	Calculated MW: 64 kDa; Observed MW: 64 kDa
Uniprot ID	Q13131
Gene ID	5562
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.

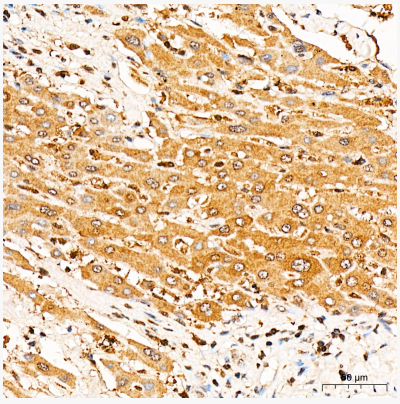
Validation Images



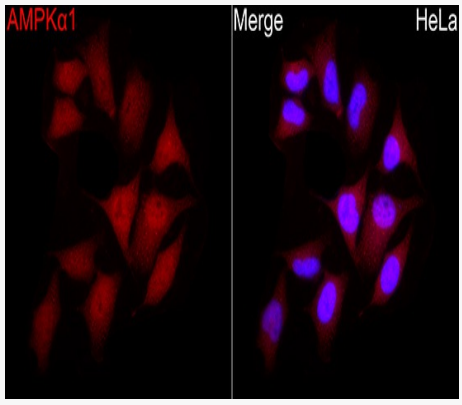
Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using AMPKα1 Rabbit pAb (P101074) at a dilution of 1:300 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



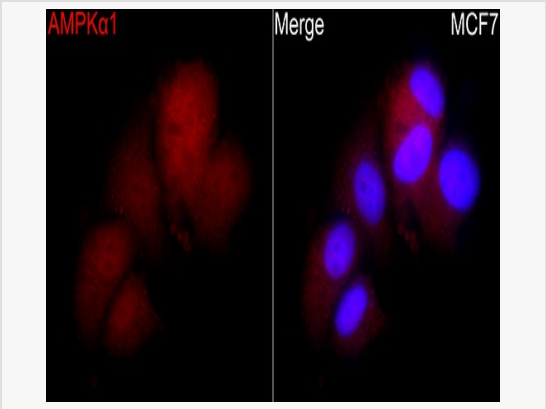
Immunohistochemistry analysis of paraffin-embedded Rat testis tissue using AMPKα1 Rabbit pAb (P101074) at a dilution of 1:300 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



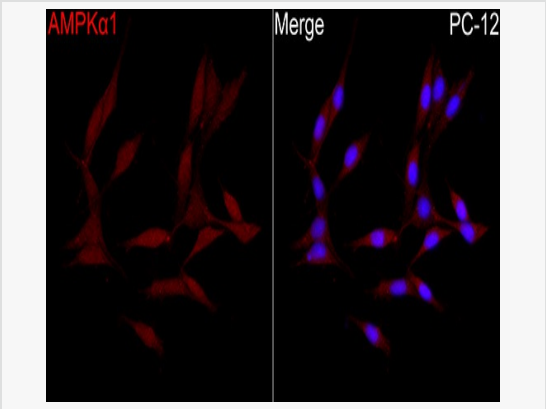
Immunohistochemistry analysis of paraffin-embedded Human liver tissue using AMPKα1 Rabbit pAb (P101074) at a dilution of 1:300 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



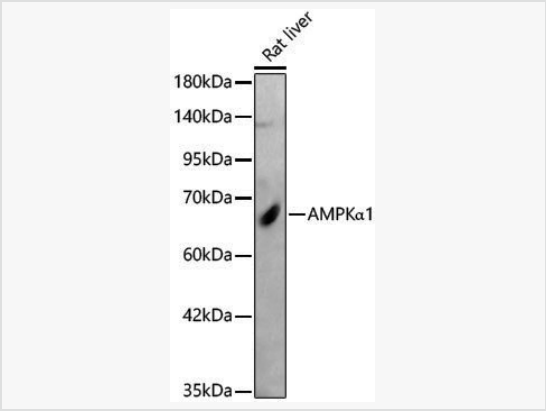
Immunofluorescence analysis of HeLa cells using AMPKα1 Rabbit pAb(P101074) at a dilution of 1:100 (40× lens). Secondary antibody:Cy3 Goat Anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of MCF7 cells using AMPKα1 Rabbit pAb(P101074) at a dilution of 1:100 (40× lens). Secondary antibody:Cy3 Goat Anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC-12 cells using AMPKα1 Rabbit pAb(P101074) at a dilution of 1:100 (40× lens). Secondary antibody:Cy3 Goat Anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Western blot analysis of lysates from Rat liver, using AMPKα1 Rabbit pAb (P101074) at 1:2,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 30s.