

## Product datasheet for **TA383644S**

### AMPK alpha 1 (PRKAA1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	IF: 1/50-200 WB: 1/500-1/2000 IHC: 1/100-1/300 ELISA: 1/40000
Reactivity:	Human, Mouse, Rat, Monkey, Pig
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized peptide derived from human AMPK alpha around the phosphorylation site of Thr172. AA range:140-189 (Phosphorylated)
Formulation:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Concentration:	lot specific
Purification:	Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Observed MW (kDa):63
Gene Name:	protein kinase AMP-activated catalytic subunit alpha 1
Database Link:	<a href="#">Entrez Gene 5562 Human Q13131</a>



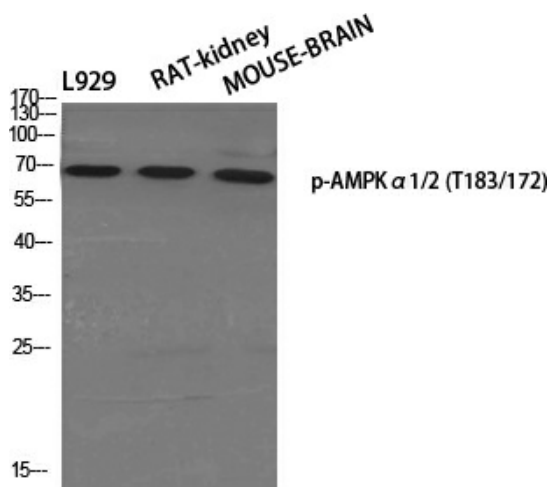
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**Background:**

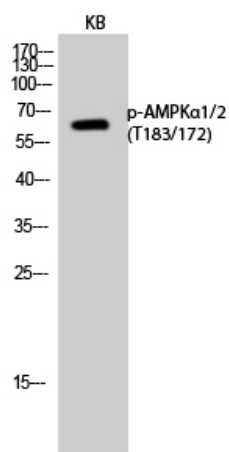
Swiss-Prot Acc.Q13131/P54646. Protein kinase AMP-activated catalytic subunit alpha 1 encoded by PRKAA1 belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The 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.

**Synonyms:**

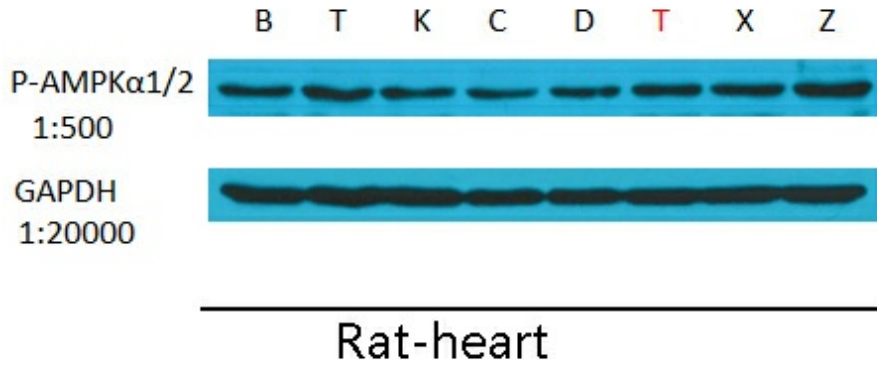
AMPK; AMPK1; AMPKa1; MGC33776; MGC57364

**Product images:**

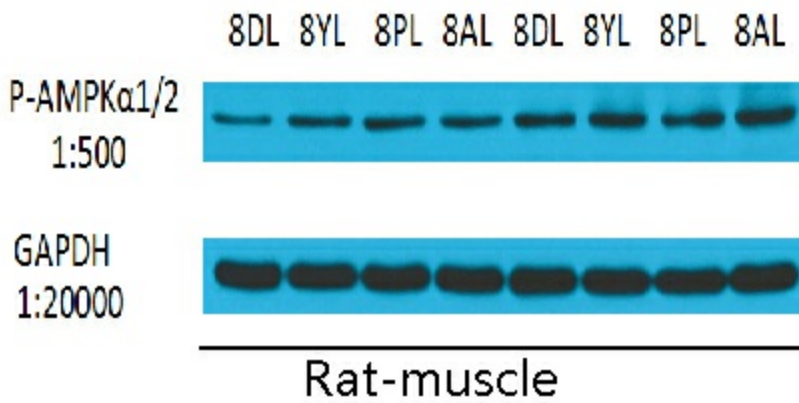
Western blot analysis of Phospho-AMPK alpha 1/2 (Thr183/Thr172) in various lysates using Phospho-AMPK alpha 1/2 (Thr183/Thr172) antibody.



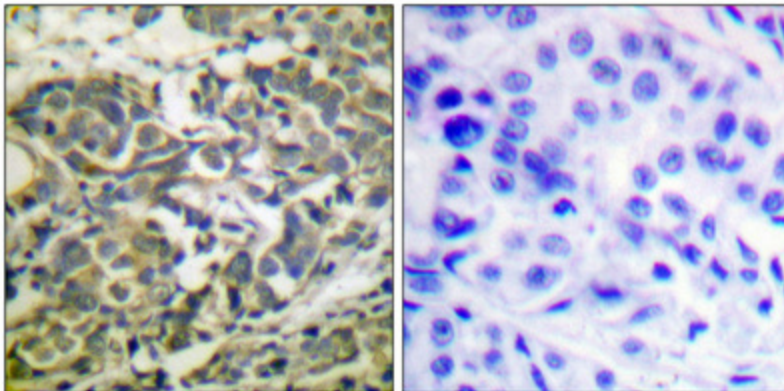
Western blot analysis of Phospho-AMPK alpha 1/2 (Thr183/Thr172) in KB lysates using Phospho-AMPK $\alpha$ 1/2 (T183/17, 2) antibody.



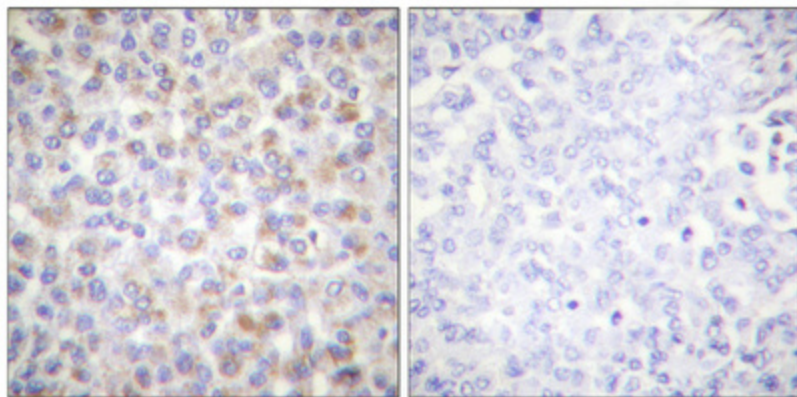
Western blot analysis of Phospho-AMPK alpha 1/2 in rat muscle heart using Phospho-AMPK alpha 1/2 antibody.



Western blot analysis of Phospho-AMPK alpha 1/2 in rat muscle lysates using Phospho-AMPK alpha 1/2 antibody.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using Phospho-AMPK alpha 1/2 (Thr183/Thr172) antibody. High-pressure and temperature Tris-EDTA pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody, was preabsorbed by immunogen peptide.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using Phospho-AMPK alpha 1/2 (Thr183/Thr172) antibody. High-pressure and temperature Tris-EDTA pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was preabsorbed by immunogen peptide.