

Datasheet for ABIN752368

**anti-PRKAA1/PRKAA2 antibody (pThr172, pThr183)**[Go to Product page](#)**1** Image**4** Publications

## Overview

Quantity:	100 µL
Target:	PRKAA1/PRKAA2
Binding Specificity:	pThr172, pThr183
Reactivity:	Human, Mouse, Rat, Pig, Sheep
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PRKAA1/PRKAA2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

## Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from mouse AMPK alpha 2 around the phosphorylation site of Thr172
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Pig, Rat, Sheep
Predicted Reactivity:	Dog,Cow,Horse,Chicken
Purification:	Purified by Protein A.

## Target Details

Target:	PRKAA1/PRKAA2
Alternative Name:	AMPK alpha-1/2 ( <a href="#">PRKAA1/PRKAA2 Products</a> )
Background:	<p>Synonyms: PRKAA1phospho T172, AMPK alpha 1 + AMPK alpha 2 phospho T183/T172, 5 AMP activated protein kinase alpha 1catalytic subunit, 5 AMP activated protein kinase catalytic alpha 1 chain, 5' AMP activated protein kinase catalytic subunit alpha 1, AAPK1, acetyl CoA carboxylase kinase, AI194361, AI450832, AL024255, AMP -activate kinase alpha 1 subunit, AMP-activated protein kinase, catalytic, alpha -1, AMPK 1, AMPK alpha 1 chain, AMPK, AMPK1, AMPKa1, AMPKalpha1, C130083N04Rik, cb116, EC 2.7.11.1, HMG CoA reductase kinase,hormone sensitive lipase kinase, im:7154392, kinase AMPK alpha1, MGC33776, MGC57364, PRKAA 1, PRKAA1, Protein kinase AMP activated alpha 1 catalytic subunit, SNF1-like protein AMPK, wu:fa94C10.</p> <p>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. [provided by RefSeq].</p>
Gene ID:	5562

## Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 FCM 1:20-100 IHC-P 1:200-400 IHC-F 1:100-500 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

## Handling

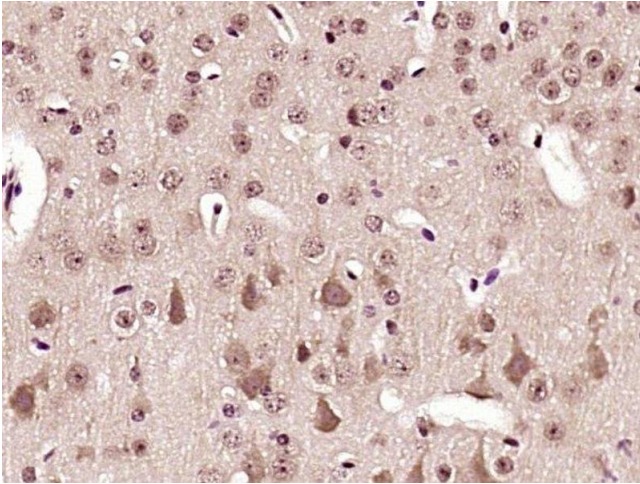
Format:	Liquid
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## Handling

Concentration:	1 µg/µL
Buffer:	0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

## Publications

Product cited in:	<p>Saito, Chikenji, Ozasa, Fujimiya, Yamashita, Gingery, Iba: "PDGFR Signaling Mediates Hyperproliferation and Fibrotic Responses of Subsynovial Connective Tissue Cells in Idiopathic Carpal Tunnel Syndrome." in: <b>Scientific reports</b>, Vol. 7, Issue 1, pp. 16192, (2019) (<a href="#">PubMed</a>).</p> <p>Zhang, Zhao, Zhang, Hao, Yu, Min, Li, Ma, Chen, Yi, Tang, Meng, Liu, Wang, Shen, Zhang: "Decrease in male mouse fertility by hydrogen sulfide and/or ammonia can be inheritable." in: <b>Chemosphere</b>, Vol. 194, pp. 147-157, (2018) (<a href="#">PubMed</a>).</p> <p>Wang, Zhao, Yu, Feng, Zhang, Kou, Chu, Cui, Li, Zhang, Shen, Min: "Regulation of steroid hormones and energy status with cysteamine and its effect on spermatogenesis." in: <b>Toxicology and applied pharmacology</b>, Vol. 313, pp. 149-158, (2016) (<a href="#">PubMed</a>).</p> <p>Zhao, Zhang, Liu, Zhang, Hao, Li, Chen, Shen, Tang, Min, Meng, Wang, Yi, Zhang: "Hydrogen Sulfide and/or Ammonia Reduces Spermatozoa Motility through AMPK/AKT Related Pathways." in: <b>Scientific reports</b>, Vol. 6, pp. 37884, (2016) (<a href="#">PubMed</a>).</p>
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#### Immunohistochemistry (Paraffin-embedded Sections)

**Image 1.** Paraformaldehyde-fixed, paraffin embedded mouse brain, Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer (normal goat serum) at 37°C for 20min, Antibody incubation with AMPK alpha-1/2 (Thr183/Thr172) Antibody at 1:400 overnight at 4°C, followed by a conjugated secondary and DAB staining.