

Datasheet for ABIN2785500
anti-PRKAA1 antibody (Middle Region)



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3 Images

Overview

Quantity:	100 µL
Target:	PRKAA1
Binding Specificity:	Middle Region
Reactivity:	Human, Mouse, Rat, Dog, Rabbit, Cow, Horse, Guinea Pig, Zebrafish (Danio rerio), Sheep
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PRKAA1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the middle region of human PRKAA1
Sequence:	SVISLLKHML QVDPMKRATI KDIREHEWFK QDLPKYLFPE DPSYSSTMID
Predicted Reactivity:	Cow: 100%, Dog: 100%, Guinea Pig: 100%, Horse: 100%, Human: 100%, Mouse: 100%, Rabbit: 100%, Rat: 100%, Sheep: 93%, Zebrafish: 100%
Characteristics:	This is a rabbit polyclonal antibody against PRKAA1. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	PRKAA1
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Target Details

Alternative Name: [PRKAA1 \(PRKAA1 Products\)](#)

Background: 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. 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.

Alias Symbols: AMPK, AMPKa1, MGC33776, MGC57364

Protein Interaction Partner: PRKAG1, PRKAB2, PRKAB1, GOLGA2, PHC2, CTBP1, CDX4, AES, Trp53, INO80E, RFX6, TRIM27, KRT40, SSX2IP, PNMA5, UBXN11, RIMBP3, L3MBTL3, TSC22D4, VPS37B, HMBOX1, HOMEZ, THAP1, ROPN1, RAD54B, MTUS2, IKZF3, RBPMS, ABI2, ZBED1, BHLHE40, TRIP6, STK11, VPS52, PPARG

Protein Size: 559

Molecular Weight: 63 kDa

Gene ID: 5562

NCBI Accession: [NM_006251](#), [NP_006242](#)

UniProt: [Q13131](#)

Pathways: [AMPK Signaling](#), [Carbohydrate Homeostasis](#), [Regulation of Carbohydrate Metabolic Process](#), [Warburg Effect](#)

Application Details

Application Notes: Optimal working dilutions should be determined experimentally by the investigator.

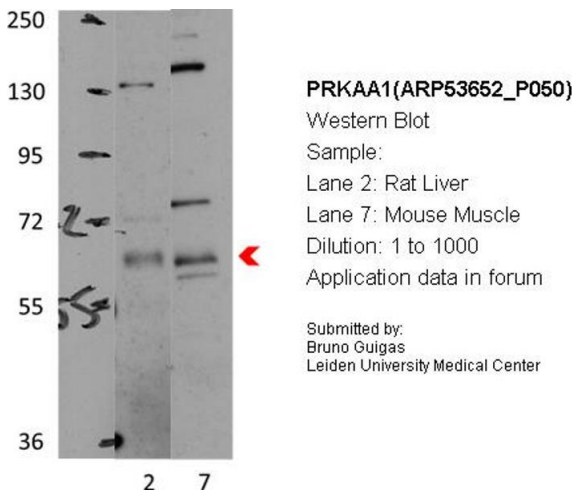
Comment: Antigen size: 559 AA

Restrictions: For Research Use only

Handling

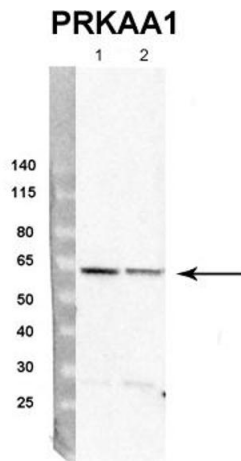
Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

Images



Western Blotting

Image 1.



Western Blotting

Image 2. Sample Type: rat hepatocyte (50ug)

Primary Dilution: 1:4000

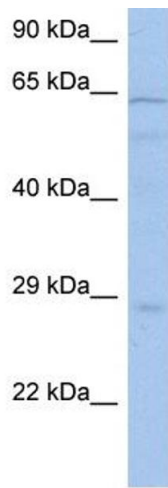
Secondary Antibody: Donkey anti-Rabbit HRP

Secondary Dilution: 1:10,000

Image Submitted By: Dustin Singer,

INRA/AgroParistech

See Immunoblot 2 Data and Customer Feedback tab for more information.



Western Blotting

Image 3. WB Suggested Anti-PRKAA1 Antibody Titration:

0.2-1 ug/ml

ELISA Titer: 1:312500

Positive Control: COLO205 cell lysate