

Product datasheet for **AM06584SU-N**

AMPK alpha 1 (PRKAA1) Mouse Monoclonal Antibody [Clone ID: 2B7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	2B7
Applications:	ELISA, FC, IF, IHC, WB
Recommended Dilution:	ELISA: 1/10000. Western Blot: 1/500 - 1/2000. Flow Cytometry: 1/200 - 1/400. Immunofluorescence: 1/200 - 1/1000. Immunohistochemistry on Paraffin Sections: 1/200 - 1/1000.
Reactivity:	Human, Monkey, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of Human PRKAA1 expressed in E. Coli.
Specificity:	Recognizes PRKAA1
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% Sodium Azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	64 kDa
Gene Name:	protein kinase AMP-activated catalytic subunit alpha 1
Database Link:	Entrez Gene 5562 Human Q13131



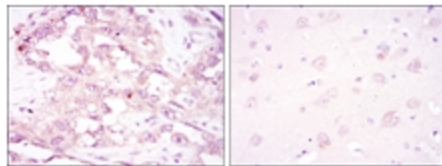
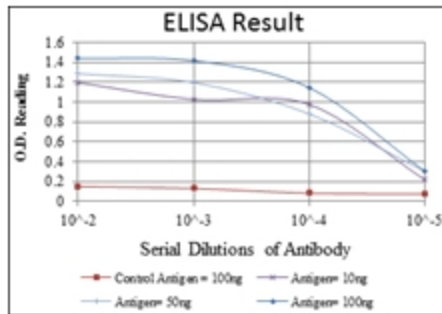
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Background:

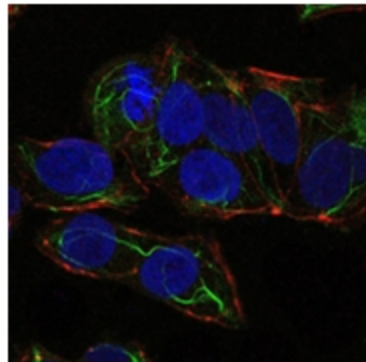
The protein belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. 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:

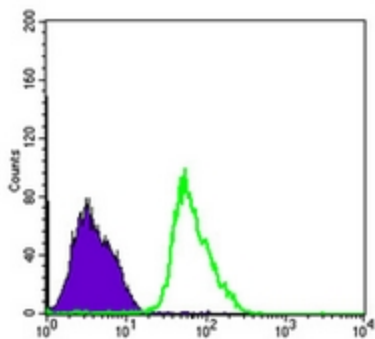
AMPK1, AMPK alpha-1 chain

Product images:

Immunohistochemical analysis of paraffin-embedded ovarian cancer (left) and brain tissues (right) using PRKAA1 mouse mAb with DAB staining.



Immunofluorescence analysis of NTERA-2 cells using PRKAA1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of PC-2 cells using PRKAA1 mouse mAb (green) and negative control (purple).