

Product datasheet for TA336924

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
Recommend Dilution:	WB: 1:500, ELISA: 1:10000, FC: 1:200-1:400, IF: 1:200-1:1000, IHC-P: 1:200-1:1000
Reactivity:	Human, Mouse, Primate, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human AMPK alpha 1 expressed in E. coli. [UniProt# Q13131]
Formulation:	PBS, 0.03% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	1 mg/ml
Purification:	Ammonium sulfate precipitation
Predicted Protein Size:	64 kDa
Gene Name:	protein kinase AMP-activated catalytic subunit alpha 1
Database Link:	NP_996790 Entrez Gene 65248 Rat Entrez Gene 105787 Mouse Entrez Gene 5562 Human
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:	AMPK; AMPKa1
Note:	This AMPK alpha 1 (2B7) antibody is useful for Western blot, Immunohistochemistry on paraffin-embedded sections, Immunocytochemistry/Immunofluorescence, Flow Cytometry and ELISA.

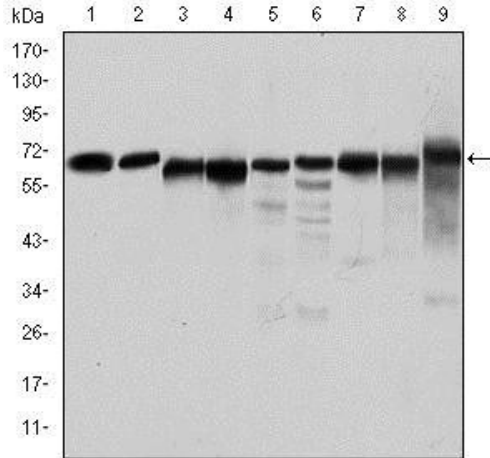


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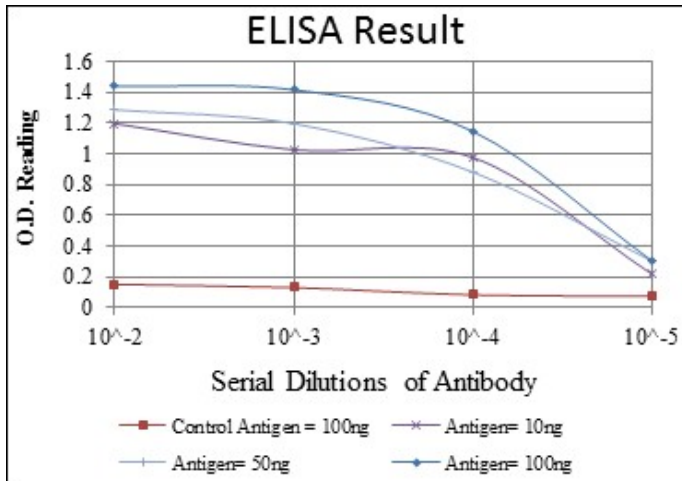
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Adipocytokine signaling pathway, Hypertrophic cardiomyopathy (HCM), Insulin signaling pathway, mTOR signaling pathway, Regulation of autophagy

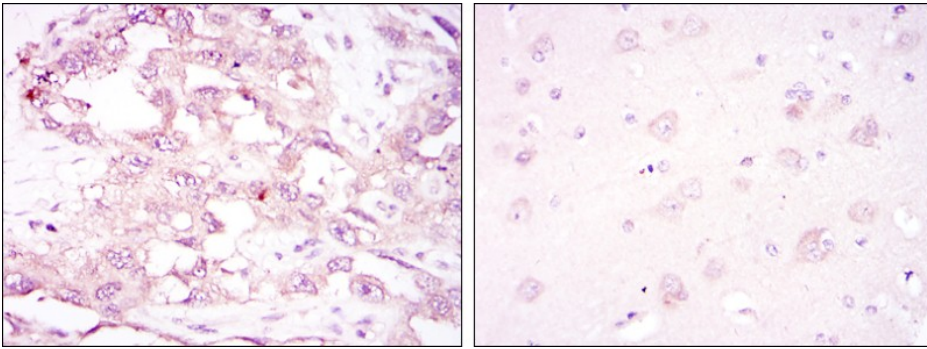
Product images:



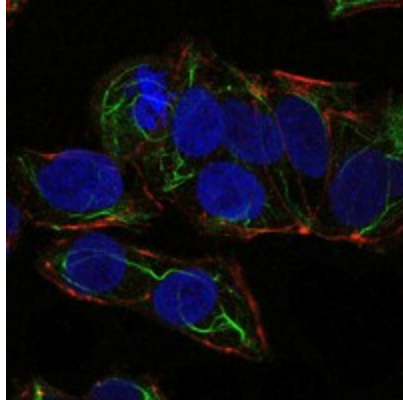
Western Blot: AMPK alpha 1 Antibody (2B7) TA336924 - Western blot analysis using AMPK alpha 1 mouse mAb against Jurkat (1), Hela (2), HepG2 (3), MCF-7 (4), Cos7 (5), NIH/3T3 (6), K562 (7), HEK293 (8), and PC-12 (9) cell lysate.



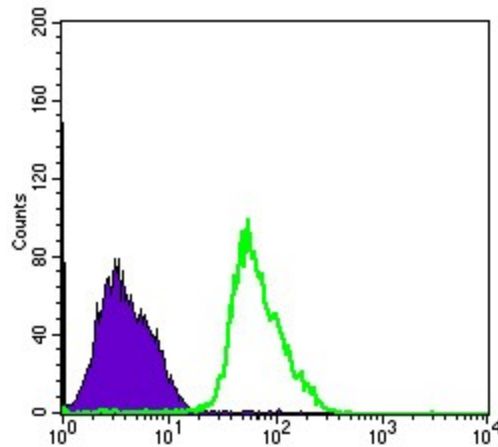
ELISA: AMPK alpha 1 Antibody (2B7) TA336924 - Red: Control Antigen (100ng); Purple: Antigen (10ng); Green: Antigen (50ng); Blue: Antigen (100ng).



Immunohistochemistry-Paraffin: AMPK alpha 1 Antibody (2B7) TA336924 - Immunohistochemical analysis of paraffin-embedded ovarian cancer (left) and brain tissues (right) using AMPK alpha 1 mouse mAb with DAB staining.



Immunocytochemistry/Immunofluorescence: AMPK alpha 1 Antibody (2B7) TA336924 - Immunofluorescence analysis of NTERA-2 cells using AMPK alpha 1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-55



Flow Cytometry: AMPK alpha 1 Antibody (2B7) TA336924 - Flow cytometric analysis of PC-2 cells using AMPK alpha 1 mouse mAb (green) and negative control (purple).