

Product datasheet for **TA333273S**

AMPK alpha 1 (PRKAA1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	IHC 1:50-1:100
Reactivity:	Human, Mouse, Rat
Modifications:	Phospho-specific
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A phospho specific peptide corresponding to residues surrounding T174/T172 of human PRKAA1
Formulation:	Store at -20°C (regular) and -80°C (long term). Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	559
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 Q13131



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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.
Synonyms:	AMPK; AMPKa1
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Adipocytokine signaling pathway, Hypertrophic cardiomyopathy (HCM), Insulin signaling pathway, mTOR signaling pathway, Regulation of autophagy