

Product datasheet for **TP318572L**

AMPK alpha 1 (PRKAA1) (NM_006251) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human protein kinase, AMP-activated, alpha 1 catalytic subunit (PRKAA1), transcript variant 1, 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC218572 representing NM_006251 Red =Cloning site Green =Tags(s)

MRRLSSWRKMATAEKQKHDGRVKIGHYILGDTLGVGTFGKVKVKGKHELTGHKQVAVKILNRQKIRSLDWVG
KIRREIQNLKLFRRPHIHKLYQVISTPSDIFMVMMEYVSGGELFDYICKNGRLDEKESRRLFQQILSGVDY
CHRHMVVHRDLKPENVLLDAHMNAKIADFGLSNMMSDGEFLRTSCGSPNYAAPEVISGRLYAGPEVDIWS
SGVILYALLCGTLPFDDDHVPTLFKKICDGFYTPQYLNPSVISLLKHMLQVDPMKRATIKDIREHEWFK
QDLPKYLFPEDPSYSSTMIDDEALKEVCEKFECSSEEVLSCLYNRNHQDPLAVAYHLLIDNRRIMNEAKD
FYLATSPDSDLDDHHLTRPHPERVPFLVAETPRARHTLDELNPQKSKHQGVRKAKWHLGIRSQSRPNDI
MAEVCRAIKQLDYEWKVVNPYYLRVRRKNPVTSTYSKMSLQLYQVDSRTYLLDFRSIDDEITEAKSGTAT
PQRSGSVSNYRSCQRSDSDAEAQGSSEVSLTSSVTSLDSSPVDLTPRPGSHTIEFFEMCANLIKILAQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

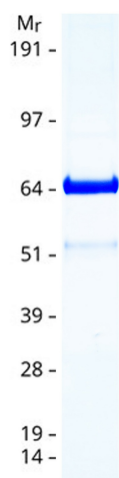
Tag:	C-Myc/DDK
Predicted MW:	63.8 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.



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Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_006242
Locus ID:	5562
UniProt ID:	Q13131
RefSeq Size:	5085
Cytogenetics:	5p13.1
RefSeq ORF:	1677
Synonyms:	AMPK; AMPKa1; AMPK alpha 1
Summary:	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, Jul 2008]
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:



Coomassie blue staining of purified PRKAA1 protein (Cat# [TP318572]). The protein was produced from HEK293T cells transfected with PRKAA1 cDNA clone (Cat# [RC218572]) using MegaTran 2.0 (Cat# [TT210002]).