

Product datasheet for PH318572

AMPK alpha 1 (PRKAA1) (NM_006251) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	PRKAA1 MS Standard C13 and N15-labeled recombinant protein (NP_006242)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC218572
Predicted MW:	63.8 kDa
Protein Sequence:	>RC218572 representing NM_006251 Red=Cloning site Green=Tags(s)

MRRLLSSWRKMATAEKQKHDGRVKIGHYILGDTLGVGTFGKVKVGKHELTGHKVAVKILNRQKIRSLDVGKIRREIQNLKLFRRPHI IKLYQVISTPSDIFMVMEYVSGGELFDYICKNGRLDEKESRRLFQQILSGVDYCHRHMVVHRDLKPENVLLDAHNAKIADFGLSNMMSDGEFLRTSCGSPNYAAPEVISGRLYAGPEVDIWSGVILYALLCGTLFPDHHVPTLFKKICDGI FYTPQYLNPSVISLLKHMLQVDPMKRATIKDIREHEWFKQDLPKYLPEDPSYSSTMIDDEALKEVCEKFECSSEEVLSCLYNRNHQDPLAVAYHLIIDNRRIMNEAKDFYLATSPDPSFLDDHHLTRPHPERVPFLVAETPRARHTLDELNPQKSKHQGVRKAKWHLGIRSQSRPNDI MAEVCRAIKQLDYEWKVVNPYYLRVRRKNPVTSTYSKMSLQLYQVDSRTYLLDFRSIDDEITEAKSGTATPQRSGSVSNYRSCQRSDSDAEAQGSSEVSLTSSVTSLDSSPVDLTPRPGSHTIEFFEMCANLIKILAQ

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_006242
RefSeq Size:	5085
RefSeq ORF:	1677



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Synonyms: AMPK; AMPKa1; AMPK alpha 1

Locus ID: 5562

UniProt ID: [Q13131](#)

Cytogenetics: 5p13.1

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