

## Product datasheet for **AR51805PU-S**

### PRKAA1 (1-279, His-tag) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	PRKAA1 (1-279, His-tag) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MGSMRRLSSW RKMATAEKQK HDGRVKIGHY ILGDTLGVGT FGKVKVGKHE LTGHKVAVKI LNRQKIRSLD VVGKIRREIQ NLKLFRRPHI IKLYQVISTP SDIFMVMMEYV SGGELFDYIC KNGRLDEKES RRLFQQILSG VDYCHRHMVW HRDLKPENVL LDAHMNAKIA DFGLSNMMSD GEFLRTSCGS PNYAAPEVIS GRLYAGPEVD IWSSGVILYA LLCGLTLPFDD DHVPTLFKKI CDGIFYTPQY LNPSVISLLK HMLQVDPMKR ATIKDIREHE WF
Tag:	His-tag
Predicted MW:	34.3 kDa
Concentration:	lot specific
Purity:	>85% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: Liquid, In 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol
Preparation:	Liquid purified protein
Protein Description:	Recombinant human PRKAA1 protein, fused to His-tag at N-terminus, was expressed in E.coli.
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<a href="#">NP_001341957</a>
Locus ID:	5562
Cytogenetics:	5p13.1
Synonyms:	AMPK; AMPKa1; AMPK alpha 1



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**Summary:**

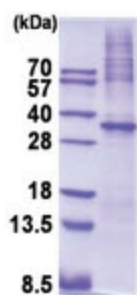
The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the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

15% SDS-PAGE (3ug)