



# Recombinant Human 5'-AMP-activated protein kinase catalytic subunit alpha-1 (PRKAA1)

<b>Product Code</b>	CSB-MP618759HU
<b>Abbreviation</b>	PRKAA1
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q13131
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MRRLSSWRKM ATA EKQKHDG RVKIGHYILG DTLGVGTFGK VKVGKHELTG HKVAVKILNR QKIRSLDVVG KIRREIQNLK LFRHPHIIKL YQVISTPSDI FMVMEYVSSG ELFDYICKNG RLDEKESRRL FQQILSGVDY CHRHMVVHRD LKPENVLLDA HMNAKIADFG LSNMMSDGEF LRTSCGSPNY AAPEVISGRL YAGPEVDIWS SGVILYALLC GTLPFDDDHV PTLFKKICDG IFYTPQYLNP SVISLLK HML QVDPMKRATI KDI REHEWFK QDL PKYLFPE DPSYSSTMID DEALKEVCEK FECSEEEVLS CLYNRNHQDP LAVAYHLIID NRRIMNEAKD FYLATSP PDS FLDDHHLTRP HPERVPFLVA ETPRARHTLD ELNPQKSKHQ GVRKAKWHLG IRSQSRPNDI MAEVCRAIKQ LDYEWKVVNP YYLRVRRKNP VTSTYSKMSL QLYQVDSRTY LLDFRSIDDE ITEAKSGTAT PQRSGSVSNY RSCQRSDSDA EAQGKSSEVS LTSSVTSLDS SPVDLTPRPG SHTIEFFEMC ANLIKILAQ
<b>Source</b>	Mammalian cell
<b>Target Names</b>	PRKAA1
<b>Protein Names</b>	Recommended name: 5'-AMP-activated protein kinase catalytic subunit alpha-1 Short name= AMPK subunit alpha-1 EC= 2.7.11.1 Alternative name(s): Tau-protein kinase PRKAA1 EC= 2.7.11.26
<b>Expression Region</b>	1-559
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	full length protein
<b>Target Details</b>	This 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.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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