



Recombinant Pig Adenylate kinase isoenzyme 1 (AK1)

Product Code	CSB-BP001508PI
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P00571
Product Type	Recombinant Protein
Immunogen Species	Sus scrofa (Pig)
Purity	>85% (SDS-PAGE)
Sequence	MEEKLKKSKI IFVVGPGSG KGTQCEKIVQ KYGYTHLSTG DLLRAEVSSG SARGKMLSEI MEKGQLVPLE TVLDMLRDAM VAKVDTSKGF LIDGYPREVK QGEEFERKIG QPTLLLYVDA GPETMTKRL KRGETSGRVD DNEETIKKRL ETYYKATEPV IAFYEKRGIV RKVNAEGSVD DVFSQVCTHL DTLK
Source	Baculovirus
Target Names	AK1
Protein Names	Recommended name: Adenylate kinase isoenzyme 1 Short name= AK 1 EC= 2.7.4.3 Alternative name(s): ATP-AMP transphosphorylase 1 Myokinase
Expression Region	1-194
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full length protein
Target Details	Adenylate kinase is an enzyme involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of phosphate group among adinine nucleotides. Three isozymes of adenylate kinase have been identified in vertebrates, adenylate isozyme 1 (AK1), 2 (AK2) and 3 (AK3). AK1 is found in the cytosol of skeletal muscle, brain and erythrocytes, whereas AK2 and AK3 are found in the mitochondria of other tissues including liver and heart. AK1 was identified because of its association with a rare genetic disorder causing nonspherocytic hemolytic anemia where a mutation in the AK1 gene was found to reduce the catalytic activity of the enzyme.
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.
Shelf Life	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.