

Recombinant Human AK4, His-tagged

Cat. No. AK4-3448H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human AK4 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
Description	AK4(adenylate kinase 4) is a member of the adenylate kinase family of enzymes. This protein is localized to the mitochondrial matrix. Adenylate kinases regulate the adenine and guanine nucleotide compositions within a cell by catalyzing the reversible transfer of phosphate group among these nucleotides. Inherited mutations leading to AK4 deficiencies in erythrocytes have been implicated in hemolytic anemia.
Form	Liquid. In 20mM Tris-HCl buffer(pH 8.0) containing 10% glycerol, 2mM DTT, 0.1M NaCl.
Molecular Weight	27.4 kDa (243aa), confirmed by MALDI-TOF (Molecular size on SDS-PAGE will appear higher)
Purity	> 90 % by SDS - PAGE
Concentration	1 mg/ml (determined by Bradford assay)
Sequences of amino acids	MGSSHHHHHH SSSLVPRGSH MASKLLRAVI LGPPGSGKGT VCQRIAQNFG LQHLSSGHFL RENIKASTEY GEMAKQYIEK SLLVPDHVIT RLMMSELENR

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RGQHWLLDGF PRTLQAEAL DKICEVDLVI SLNIPFETLK DRLSRRWIHP
 PSGRVYNLDF NPPHVHGIDD VTGEPLVQQE DDKPEAVAAR LRQYKDVAKP
 VIELYKSRGV LHQFSGTETN KIWPYVYTLF SNKITPIQSK EAY

Storage

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION
Gene Name

[AK4 adenylate kinase 4 \[Homo sapiens \]](#)

Synonyms

AK3L1; adenylate kinase 3-like 1; AK3L1 adenylate kinase 3-like 1; AK3; AK4; MGC166959; EC 2.7.4.3; OTTHUMP00000010594; ATP-AMP transphosphorylase; GTP:AMP phosphotransferase; Adenylate kinase 3-like; adenylate kinase 3; mitochondrial adenylate kinase-3; nucleoside-triphosphate-adenylate kinase

Gene ID

[205](#)

mRNA Refseq

[NM_001005353](#)

Protein Refseq

[NP_001005353](#)

MIM

[103030](#)

UniProt ID

[P27144](#)

**Chromosome
Location**

1p31.3

Pathway

Purine metabolism

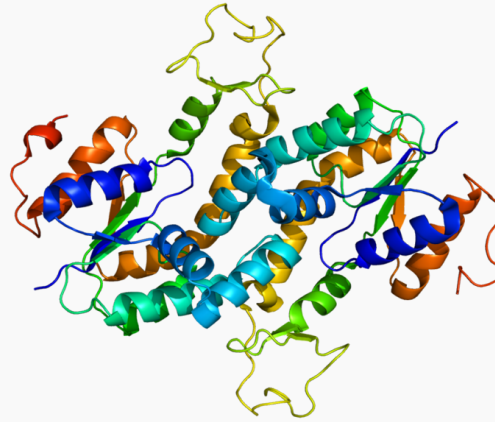
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Function

ATP binding; GTP binding; adenylate kinase activity; nucleotide binding; transferase activity

**PDBrendering based
on 2ar7**

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