

California Bioscience

Product Datasheet

Product Name	Adenylate Kinase 2 Human Recombinant
Cata No	CB501430
Source	Escherichia Coli.
Synonyms	ADK2, AK-2, Adenylate kinase isoenzyme 2 mitochondrial, ATP-AMP
	transphosphorylase 2, adenylate kinase 2.

Description

Adenylate kinases play a role in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of phosphate groups among adenine nucleotides. There are 3 types of adenylate kinase isozymes, AK1, AK2, and AK3 in vertebrates. Expression of these isozymes are tissue-specific and developmentally regulated. AK2 is localized in the mitochondrial intermembrane space and is involved in apoptosis. AK2 is mutated in individuals with reticular dysgenesis. AK2 Human Recombinant produced in E.Coli is a

single, non-glycosylated, polypeptide chain containing 259 amino acids and having a molecular mass of 28.6 kDa.

AK2 is fused to 20 a.a. His-Tag at N-terminus and purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered colorless solution.

Purity

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Formulation

AK2 solution containing 20mM Tris pH-7.5, 5mM DTT and 20% glycerol.

Stability

AK2 Human Recombinant although stable at 4°C for 1 week, should be stored below -18°C. Please prevent freeze thaw cycles.

Sequence

MGSSHHHHHH SSGLVPRGSH MAPSVPAAEP EYPKGIRAVL LGPPGAGKGTQAPRLAENFC VCHLATGDML RAMVASGSEL GKKLKATMDA GKLVSDEMVV ELIEKNLETP LCKNGFLLDG FPRTVRQAEM LDDLMEKRKE KLDSVIEFSIPDSLLIRRIT GRLIHPKSGR SYHEEFNPPK EPMKDDITGE PLIRRSDDNE KALKIRLQAY HTQTTPLIEY YRKRGIHSAI DASQTPDVVF ASILAAFSKA TCKDLVMFI.