

## 32-6954: AK2 Mouse

**Application :** Functional Assay

**Alternative Name :** Adenylate kinase 2 mitochondrial isoform a, Ak-2, D4Ertd220e, mitochondrial, ATP-AMP transphosphorylase 2, ATP:AMP phosphotransferase, Adenylate monophosphate kinase.

### Description

Source: Escherichia Coli.

Sterile filtered colorless solution.

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 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 263 amino acids (1-239 a.a) and having a molecular mass of 29kDa. AK2 is fused to a 24 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 1 µg / 5 µg

**Purification :** Greater than 95.0% as determined by SDS-PAGE.

**Content :** AK2 protein solution (0.5mg/ml) containing 20mM Tris-HCl buffer (pH8.5), 10% glycerol and 1mM DTT.

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

**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MGSHMAPNVL ASEPEIPKGI RAVLLGPPGA GKGQTQAPKLA ENFCVCHLAT  
GDMLRAMVAS GSEL TMDAGKLVSD EMVVELIEKN LETPCKNGF LLDGFPRTVR QAEMLDLME  
KRKEKLDSEI EFSIQDSLII RRITGRLIHP KSGRSNPPKEPMKDD ITGEPLIRRS DDNEKALKTR  
LEAYHTQTTP LVEYYRKRG I HCAIDASQTP DIVFASILAA FSKATCKDLV MFI

### Application Note

Specific activity is > 40 units/mg. One unit will convert 2.0 umoles of ADP to ATP + AMP per minute at pH 7.5 at 37C.