

# AK2 Knockout HeLa Cell Lysate, Homozygous

Catalog No.: RM02362

## Basic Information

### Catalog No.

RM02362

### Category

Cell Lysate

### Parental Cell line

HeLa

### Genotype

Knockout

## Gene Information

### Gene Symbol

AK2

### Species

Human

### Gene ID

204

### Swiss Prot

P54819

### Synonyms

ADK2

## Contact

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## Background

Adenylate kinases are involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of phosphate groups among adenine nucleotides. Three isozymes of adenylate kinase, namely 1, 2, and 3, have been identified in vertebrates; this gene encodes isozyme 2. Expression of these isozymes is tissue-specific and developmentally regulated. Isozyme 2 is localized in the mitochondrial intermembrane space and may play a role in apoptosis. Mutations in this gene are the cause of reticular dysgenesis. Alternate splicing results in multiple transcript variants. Pseudogenes of this gene are found on chromosomes 1 and 2.[provided by RefSeq, Nov 2010]

## Product Information

### Description

AK2 Knockout HeLa Cell Line is engineered from HeLa cell line with Gene-Editing technology.  
Allele-1: Insert the 181 bases, the promoter was damaged  
Allele-2: Insert the 181 bases, the promoter was damaged  
Mammalian cells such as human, rat and mouse cells are normally diploid with two alleles.  
Homozygote: both alleles were knocked out, mRNA has no signal, no expression of proteins.  
Heterozygote: only one allele was knocked out, the mRNA transcript levels was decreased compared to wild type, and the protein expression levels was also lower than that of the wild type.

### Packaging

1 vial parental cell Lysate and 1 vial knockout cell Lysate

### Shipping Conditions

4°C

### Amount

50µL, 2µg/µL.

### Storage

Lysate is stable for 12 months when stored at -20°C. Minimizing freeze-thaw cycles.

### Protocol

To be used as WB control. Lysate is supplied in 1× SDS sample buffer (2% SDS, 60 mM Tris-HCl pH 6.8, 10% Glycerol, 0.02% Bromophenol blue, 60 mM beta-mercaptoethanol). Lysate should be boiled for 3 - 5 minutes before loading onto gel.

## Sequencing data

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WT CGTGCGTGGCGTGC\*\*\*\*\*AAGCACTGGACCTG  
Mut CGTGCGTGGCGTGC\*\*\*Insertion\*\*\*AAGCACTGGACCTG  
Allele-1: Insert the 181 bases, the promoter was damaged  
WT CGTGCGTGGCGTGC\*\*\*\*\*AAGCACTGGACCTG  
Mut CGTGCGTGGCGTGC\*\*\*Insertion\*\*\*AAGCACTGGACCTG  
Allele-2: Insert the 181 bases, the promoter was damaged

Genome sequence analysis of PCR products from parental (WT) and AK2 knockout (KO) HeLa cells, using sanger sequencing.