

## **Product datasheet for KN209974LP**

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### **AK2 Human Gene Knockout Kit (CRISPR)**

#### **Product data:**

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

**Donor DNA:** Luciferase-Puro

Symbol: AK2 Locus ID: 204

**Components:** KN209974G1, AK2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN209974G2, AK2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN209974LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

**Disclaimer:** These products are manufactured and supplied by OriGene under license from ERS. The kit is

designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the

experimental process.

RefSeq: NM 001199199, NM 001319139, NM 001319140, NM 001319141, NM 001319142,

NM 001319143, NM 001625, NM 013411, NM 172199, NR 037591, NR 037592, NR 134976

 UniProt ID:
 P54819

 Synonyms:
 ADK2; AK 2

**Summary:** 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 images:**

#### Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter