

# PRKAA1 Knockout HeLa Cell Lysate, Homozygous

Catalog No.: RM02255

## Basic Information

**Catalog No.**

RM02255

**Category**

Cell Lysate

**Parental Cell line**

HeLa

**Genotype**

Knockout

## Gene Information

**Gene Symbol**

PRKAA1

**Species**

Human

**Gene ID**


5562

**Swiss Prot**

Q13131

**Synonyms**AMPK; AMPK $\alpha$ 1

## Contact

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## Background

The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]

## Product Information

**Description**

PRKAA1 Knockout HeLa Cell Line is engineered from HeLa cell line with Gene-Editing technology.

Allele-1:1bp deletion in exon2

Allele-2:2bp deletion in exon2

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**50 $\mu$ L, 2 $\mu$ g/ $\mu$ L.**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 $\times$  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 TCGGAGCCTTGATG\*\*\*\*\*GGTAGGAAAATCC  
Mut TCGGAGCCTTGATG\*\*\*Deletion\*\*\*GGTAGGAAAATCC  
Allele-1: 1bp deletion in exon2  
WT TCGGAGCCTTGATG\*\*\*\*\*GTAGGAAAATCCG  
Mut TCGGAGCCTTGATG\*\*\*Deletion\*\*\*GTAGGAAAATCCG  
Allele-2: 2bp deletion in exon2

Genome sequence analysis of PCR products from parental (WT) and PRKAA1 knockout (KO) HeLa cells, using sanger sequencing.