

# IMPDH1 Knockout NIH/3T3 cell lysate, Homozygous

Catalog No.: RM50178

## **Basic Information**

#### Catalog No.

RM50178

## Category

Cell Lysate

#### **Parental Cell line**

NIH/3T3

## Genotype

Knockout

## **Background**

Enables IMP dehydrogenase activity. Involved in 'de novo' XMP biosynthetic process and GMP biosynthetic process. Acts upstream of or within lymphocyte proliferation and purine nucleotide biosynthetic process. Predicted to be located in cytosol and nucleus. Predicted to be active in cytoplasm. Is expressed in central nervous system and retina outer nuclear layer. Human ortholog(s) of this gene implicated in Leber congenital amaurosis 11; retinitis pigmentosa; and retinitis pigmentosa 10. Orthologous to human IMPDH1 (inosine monophosphate dehydrogenase 1).

## **Gene Information**

## **Gene Symbol**

IMPDH1

#### **Species**

Mouse

#### **Gene ID**

23917

## **Swiss Prot**

P20839

#### **Synonyms**

IMPDH-I; B930086D20Rik

### **Contact**

<u>a</u>		400-999-6126
$\bowtie$		cn.market@abclonal.com.cn
•	Τ	www.abclonal.com.cn

## **Product Information**

#### Description

IMPDH1 Knockout cell line is engineered from NIH/3T3 cell line with Gene-Editing Technology.

Allele-1:67bp deletion in exon1

Allele-2:67bp deletion in exon1

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 Amount  $4^{\circ}$ C 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

WT GAGGCAGTGGCAGC\*\*\*\*\*\*\*\*\*\*\*\*\*TCTTTGCCAACGCG
Mut GAGGCAGTGGCAGC\*\*\*Deletion\*\*\*TCTTTGCCAACGCG
Allele-1: 67bp deletion in exon1

WT GCGG\*\*\*\*\*\*\*\*\*\*\*AGGC\*\*CAGC\*\*\*\*\*\*\*\*\*\*\*TCTT
Mut GCGG\*\*\*Deletion\*\*\*AGGC\*\*CAGC\*\*Deletion\*\*\*TCTT
Allele-2: 67bp deletion in exon1

Genome sequence analysis of PCR products from parental (WT) and IMPDH1 knockout (KO) NIH/3T3 cells, using sanger sequencing.