Leader in Biomolecular Solutions for Life Science

www.abclonal.com

IMPDH1 Knockout NIH/3T3 cell line, Homozygous

Catalog No.: RM50170

Basic Information

Catalog No.
RM50170

Category
Cell Lysate

Parental Cell line
NIH/3T3

Genotype
Knockout

Gene Information

Gene Symbol
IMPDH1

Species
Mouse

Gene ID
23917

Swiss Prot
P20839

Synonyms
IMPDH-I; B930086D20Rik

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

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).

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 line and 1 vial knockout cell line

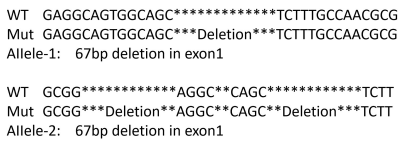
Shipping Conditions
Dry ice

Amount
1~5x10^6 cells/vial.

Storage
Stored in liquid nitrogen for a long time less than -130℃. Minimizing freeze-thaw cycles.

Protocol
Upon arrival, it should be maintained in DMEM medium with 10%(v/v) fetal bovine serum and 100U penicillin-streptomycin, at 37℃ with 5% CO_2 condition.
1. Thaw the vial in 37℃ water bath ,and shake it to melt as soon as possible.
2. Transfer the cell suspension to a 15mL conical tube with pre-warmed 5mL complete medium and centrifuge 1000rpm for approximately 5 minutes at room temperature.
3. Remove and discard the supernatant.
4. Resuspend the cell pellet with 1mL pre-warmed complete medium and seed in 10cm dish.
5. Add 8-10mL of complete medium.
6. Incubate the culture at 37℃ incubator with 5% CO_2.
7. A subcultivation ratio of 1:2-1:4 is recommended.

Sequencing data



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