

IL1RN Knockout 293T Cell Line, Homozygous

Catalog No.: RM02713

Basic Information

Catalog No.

RM02713

Category

Cell Line

Parental Cell line

293T

Genotype

Knockout

Gene Information

Gene Symbol

IL1RN

Species

Human

Gene ID

3557

Swiss Prot

P18510

Synonyms

DIRA; IRAP; IL1F3; IL1RA; MVCD4; IL-1RN;
IL-1ra; IL-1ra3; ICIL-1RA

Contact

 | 400-999-6126

 | cn.market@abclonal.com.cn

 | www.abclonal.com.cn

Background

The protein encoded by this gene is a member of the interleukin 1 cytokine family. This protein inhibits the activities of interleukin 1, alpha (IL1A) and interleukin 1, beta (IL1B), and modulates a variety of interleukin 1 related immune and inflammatory responses, particularly in the acute phase of infection and inflammation. This gene and five other closely related cytokine genes form a gene cluster spanning approximately 400 kb on chromosome 2. A polymorphism of this gene is reported to be associated with increased risk of osteoporotic fractures and gastric cancer. Several alternatively spliced transcript variants encoding distinct isoforms have been reported.

Product Information

Description

IL1RN Knockout cell line is engineered from 293T cell line with Gene-Editing Technology.

Allele-1:80bp deletion in exon1

Allele-2:89bp 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

1~5x10⁶ cells/vial.

Storage

Stored in liquid nitrogen for a long time less than -130°C. 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°C with 5% CO₂ condition.

1. Thaw the vial in 37°C 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°C incubator with 5% CO₂.
7. A subcultivation ratio of 1:2-1:4 is recommended.

Sequencing data

WT AACTCTGGGCCCG*****CTCTGGGAGAAAAT
Mut AACTCTGGGCCCG***Deletion***CTCTGGGAGAAAAT
Allele-1: 80bp deletion in exon1

Genome sequence analysis of PCR products from parental (WT) and IL1RN knockout (KO) 293T cells, using sanger sequencing.

WT AACTCTGGGCCCG*****AAAATCCAGCAAGA
Mut AACTCTGGGCCCG***Deletion***AAAATCCAGCAAGA
Allele-2: 89bp deletion in exon1