

PYCARD Knockout HeLa Cell Line, Homozygous

Catalog No.: RM02207

Basic Information

Catalog No.

RM02207

Category

Cell Line

Parental Cell line

HeLa

Genotype

Knockout

Gene Information

Gene Symbol

PYCARD

Species

Human

Gene ID

29108

Swiss Prot

Q9ULZ3

Synonyms

ASC; CARD5; TMS; TMS-1; TMS1

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Background

This gene encodes an adaptor protein that is composed of two protein-protein interaction domains: a N-terminal PYRIN-PAAD-DAPIN domain (PYD) and a C-terminal caspase-recruitment domain (CARD). The PYD and CARD domains are members of the six-helix bundle death domain-fold superfamily that mediates assembly of large signaling complexes in the inflammatory and apoptotic signaling pathways via the activation of caspase. In normal cells, this protein is localized to the cytoplasm; however, in cells undergoing apoptosis, it forms ball-like aggregates near the nuclear periphery. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product Information

Description

PYCARD Knockout cell line is engineered from HeLa cell line with Gene-Editing Technology.

Allele-1:20bp deletion in exon1

Allele-2:110bp 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 CCGCTGCGCGAGGG*****GCGCGCTGCTGTCC
Mut CCGCTGCGCGAGGG***Deletion***GCGCGCTGCTGTCC
Allele-1: 20bp deletion in exon1
WT CCATGGGGCGCGCG*****GGGCGCGCTGCTGT
Mut CCATGGGGCGCGCG***Deletion***GGGCGCGCTGCTGT
Allele-2: 110bp deletion in exon1

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