

## Product datasheet

# Human TRIM34 (RNF21/IFP1) knockout A549 cell line ab267011

[3 Images](#)

### Overview

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<b>Product name</b>	Human TRIM34 (RNF21/IFP1) knockout A549 cell line
<b>Parental Cell Line</b>	A549
<b>Organism</b>	Human
<b>Mutation description</b>	Knockout achieved by using CRISPR/Cas9, 1 bp deletion in exon 8 and 1 bp insertion in exon 8
<b>Passage number</b>	<20
<b>Knockout validation</b>	Sanger Sequencing
<b>Biosafety level</b>	2

### General notes

**Recommended control:** Human wild-type A549 cell line ([ab255450](#)). Please note a wild-type cell line is not automatically included with a knockout cell line order, if required please add recommended wild-type cell line at no additional cost using the code WILDTYPE-TMTK1.

**Cryopreservation cell medium:** Cell Freezing Medium-DMSO Serum free media, contains 8.7% DMSO in MEM supplemented with methyl cellulose.

**Culture medium:** F-12K + 10% FBS

**Initial handling guidelines:** Upon arrival, the vial should be stored in liquid nitrogen vapor phase and not at -80°C. Storage at -80°C may result in loss of viability.

1. Thaw the vial in 37°C water bath for approximately 1-2 minutes.
2. Transfer the cell suspension (0.8 mL) to a 15 mL/50 mL conical sterile polypropylene centrifuge tube containing 8.4 mL pre-warmed culture medium, wash vial with an additional 0.8 mL culture medium (total volume 10 mL) to collect remaining cells, and centrifuge at 201 x g (rcf) for 5 minutes at room temperature. 10 mL represents minimum recommended dilution. 20 mL represents maximum recommended dilution.
3. Resuspend the cell pellet in 5 mL pre-warmed culture medium and count using a haemocytometer or alternative cell counting method. Based on cell count, seed cells in an appropriate cell culture flask at a density of  $2 \times 10^3$ - $1 \times 10^4$  cells/cm<sup>2</sup>. Seeding density is given as a guide only and should be scaled to align with individual lab schedules.
4. Incubate the culture at 37°C incubator with 5% CO<sub>2</sub>. Cultures should be monitored daily.

### Subculture guidelines:

All seeding densities should be based on cell counts gained by established methods.

A guide seeding density of  $6 \times 10^4$  cells/cm<sup>2</sup> is recommended.

A partial media change 24 hours prior to subculture may be helpful to encourage growth, if

required.

Cells should be passaged when they have achieved 80-90% confluence.

Do not exceed  $7 \times 10^4$  cells/cm<sup>2</sup>.

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We will provide viable cells that proliferate on revival.

## Properties

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<b>Number of cells</b>	1 x 10 <sup>6</sup> cells/vial, 1 mL
<b>Adherent /Suspension</b>	Adherent
<b>Tissue</b>	Lung
<b>Cell type</b>	epithelial
<b>Disease</b>	Carcinoma
<b>Gender</b>	Male
<b>STR Analysis</b>	Amelogenin X,YD5S818: 11 D13S317: 11 D7S820: 8, 11 D16S539: 11, 12 WWA: 14 TH01: 8,9,3 TPOX: 8,11 CSF1PO: 10, 12
<b>Mycoplasma free</b>	Yes
<b>Storage instructions</b>	Shipped on Dry Ice. Store in liquid nitrogen.
<b>Storage buffer</b>	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

## Target

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<b>Relevance</b>	RNF21 (TRIM34) is a member of the tripartite motif (TRIM) family. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. Expression of the TRIM34 gene is up-regulated by interferon.
<b>Cellular localization</b>	cytoplasm

## Images

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Mut	AGGAGCACCCTGGTCACCACACAGTCCTCA- GGAGGAAGTATTCAAGGAATGTCAGGTAG
WT	AGGAGCACCCTGGTCACCACACAGTCCTCACGGAGGAAGTATTCAAGGAATGTCAGGTAG

Sanger Sequencing - Human TRIM34 knockout  
A549 cell line (ab267011)

Allele-1: 1 bp deletion in exon8

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Mut  AGGAGCACCCTGGTCACCACACAGTCCTCAACGGAGGAAGTATTCAAGGAATGTCAGGTA
      |||
WT   AGGAGCACCCTGGTCACCACACAGTCCTCA  CGGAGGAAGTATTCAAGGAATGTCAGGTA
  
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Sanger Sequencing - Human TRIM34 knockout  
A549 cell line (ab267011)

Allele-2: 1 bp insertion in exon 8.

Cell Culture - Human TRIM34 (RNF21/IFP1)  
knockout A549 cell line (ab267011)

Representative images of TRIM34 knockout A549 cells, low and high confluency examples (top left and right respectively) and wild-type A549 cells, low and high confluency (bottom left and right respectively) showing typical adherent, epithelial-like morphology. Images were captured at 10X magnification using a EVOS XL Core microscope.

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