

# CONFIDENCE TO SOAR.



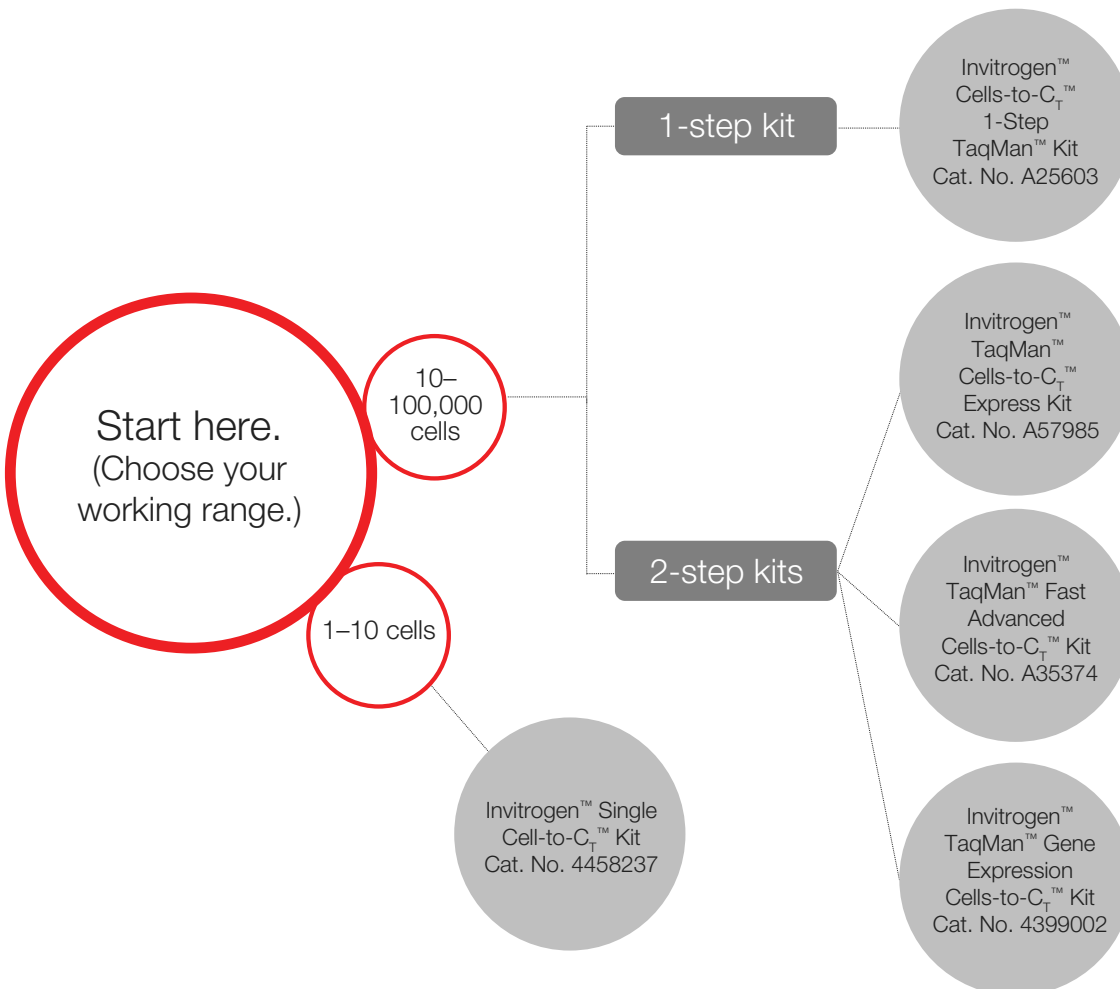
Nucleic acid analysis

## Cells-to- $C_T$ kits

A faster and more sensitive way to  
measure gene expression

invitrogen

# Cells-to-C<sub>T</sub> kit portfolio



Note: Invitrogen™ SYBR™ Green reagent detection chemistry is also available for selected kits.

## Choose a 1-step kit, if you:

- Do not store cDNA
- Dispose of samples after one or a few uses
- Have many samples with one or a few targets

## Choose a 2-step kit, if you:

- Need higher sensitivity for rare transcripts
- Might archive cDNA
- Will quantify multiple targets from cDNA

**Both 1-step and 2-step kits can be used with liquid handling robotics and are suitable for automation.**

# Fast-track gene expression analysis using Cells-to-C<sub>T</sub> kits

## RT-qPCR without RNA purification

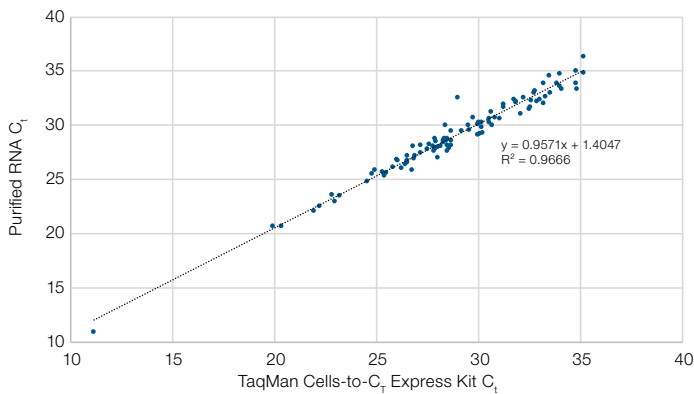
Leading in gene expression analysis techniques, Invitrogen™ Cells-to-C<sub>T</sub>™ kits measure relative gene expression by reverse transcription (RT) real-time PCR (qPCR) without RNA purification prior to amplification.

Available in both Invitrogen™ TaqMan™ and SYBR™ Green detection chemistries, Cells-to-C<sub>T</sub> kits provide a complete workflow for RT-qPCR analysis directly from cultured cells, providing you with excellent performance, reliability, and world-class support.

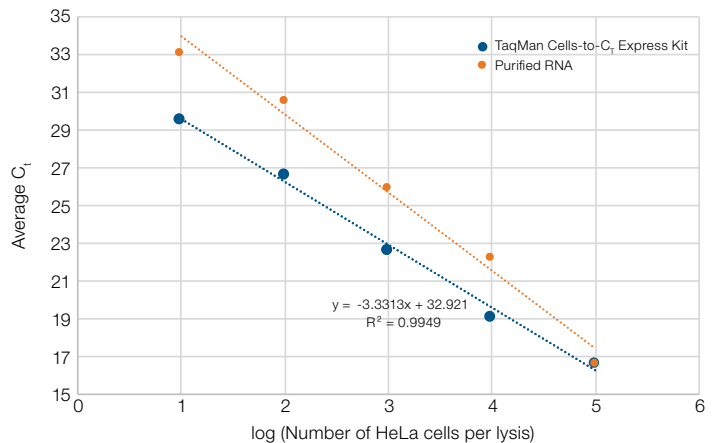
- Extraordinary ease and speed—96 samples ready for RT-qPCR in as little as 5 minutes
- Skip tedious RNA purification—no columns, heating, or centrifugation
- Exceptional performance—designed for consistent accuracy, reproducibility, and sensitivity with 10–100,000 cells
- Analytically validated kit workflows—complete sets of reagents preoptimized to work efficiently right out of the box

### Skip RNA purification without compromising performance

As with all Cells-to-C<sub>T</sub> products, the TaqMan Cells-to-C<sub>T</sub> Express Kit provides high-quality results with better sensitivity than amplification of RNA purified by traditional column-based extraction methods.



**Figure 1. Consistent results across a variety of genes with a broad array range of expression.** Data from 96 assays using Applied Biosystems™ TaqMan™ Array Cards compare the performance of the TaqMan Cells-to-C<sub>T</sub> Express Kit versus a traditional approach using purified RNA. Lysate obtained from 10,000 HeLa cells.



**Figure 2. The TaqMan Cells-to-C<sub>T</sub> Express Kit showing greater sensitivity and accuracy than traditional spin column purification RNA and amplification, especially with low cell inputs.** Lysate input from HeLa cells ranging from 10–100,000 shows lower C<sub>T</sub> values than traditional spin column RNA purification and amplification. No RNA is lost using direct cell lysis.

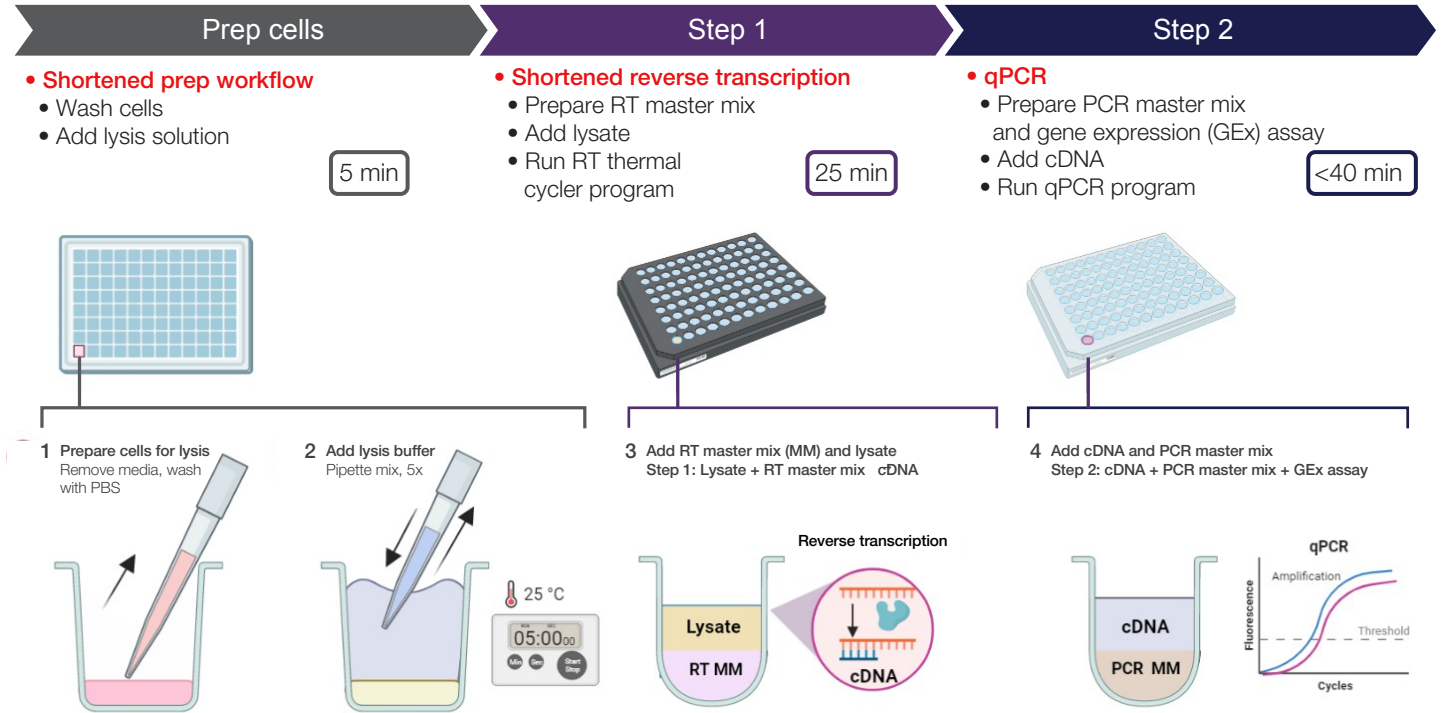
# TaqMan Cells-to-C<sub>T</sub> Express Kit

## Your workflow just got faster and easier

Measure relative gene expression without purifying RNA prior to amplification with the TaqMan Cells-to-C<sub>T</sub> Express Kit. The kit allows you to prepare cell lysates for RT-qPCR in just 5 minutes. Obtain gene expression results from an entire plate of cells in 70 minutes.

### TaqMan Cells-to-C<sub>T</sub> Express Kit workflow

Shorter prep and RT times—stop solution eliminated



- Streamlined workflow with fewer pipetting steps
- Invitrogen™ Cells-to-C<sub>T</sub>™ Express Lysis Buffer can be stored at room temperature
- High-efficiency RT enzyme
- Compatible with more than 700,000 Applied Biosystems™ TaqMan™ gene expression assays

### More sustainable and automation-friendly

- The TaqMan Cells-to-C<sub>T</sub> Express Kit is REACH-compliant,\* having fewer components for gene expression analysis
- Fewer touchpoints, less plastic waste, and increased stability

Figure 3. Comparison of plastic waste generated using the TaqMan Cells-to-C<sub>T</sub> Express Kit versus a traditional column-based RNA extraction method for eight samples.

\* REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): This product meets the regulations that were created by the European Union to improve the environment and protect human health. REACH addresses the risks associated with the production and use of chemical substances, and promotes alternative methods for the hazard assessment of such substances.

## Ordering information

Description	Quantity	Cat. No.
<b>TaqMan Cells-to-C<sub>T</sub> products</b>		
<b>2-step reaction format</b>		
TaqMan Cells-to-C <sub>T</sub> Express Kit	40 reactions	A57985
	100 reactions	A57986
	400 reactions	A57987
	2,500 reactions*	A57988
TaqMan Cells-to-C <sub>T</sub> Express Lysis Reagents	2,500 reactions**	A57989
TaqMan Fast Advanced Cells-to-C <sub>T</sub> Kit	40 reactions	A35374
	100 reactions	A35377
	400 reactions	A35378
TaqMan Gene Expression Cells-to-C <sub>T</sub> Kit	40 reactions	4399002
	100 reactions	AM1728
	400 reactions	AM1729
<b>1-step reaction format</b>		
Cells-to-C <sub>T</sub> 1-Step TaqMan Kit	20 reactions	A25605
	40 reactions	A25603
	400 reactions	A25602
<b>SYBR Cells-to-C<sub>T</sub> products</b>		
<b>2-step reaction format</b>		
SYBR Green Fast Advanced Cells-to-C <sub>T</sub> Kit	40 reactions	A35379
	100 reactions	A35380
	400 reactions	A35381
<b>1-step reaction format</b>		
Cells-to-C <sub>T</sub> 1-Step <i>Power</i> SYBR Green Kit	20 reactions	A25601
	100 reactions	A25600
	400 reactions	A25599
<b>Cells-to-C<sub>T</sub> controls</b>		
TaqMan Cells-to-C <sub>T</sub> Control Kit	100 reactions	4386995
SYBR Green Cells-to-C <sub>T</sub> Control Kit	100 reactions	4402959
<b>Cells-to-C<sub>T</sub> bulk products</b>		
TaqMan Cells-to-C <sub>T</sub> Express Kit	2,500 reactions	A57988
TaqMan Cells-to-C <sub>T</sub> Express Lysis Reagents	2,500 reactions	A57989
Cells-to-C <sub>T</sub> Bulk Lysis Reagents	2,500 reactions	4391851C†
Cells-to-C <sub>T</sub> Bulk Fast Advanced RT Reagents	2,500 reactions	A39110
Cells-to-C <sub>T</sub> Bulk RT Reagents	2,500 reactions	4391852C‡

\* Cat. No. A57988, TaqMan Cells-to-C<sub>T</sub> Express Kit, is a bulk product containing all Express Lysis Solution and RT reagents for 2,500 reactions. Controls included.

\*\* Cat. No. A57989, TaqMan Cells-to-C<sub>T</sub> Express Lysis Reagents, is a bulk product containing Express Lysis Solution, Invitrogen™ ezDNase™ enzyme, and Fast Advanced Master Mix. Controls included.

† Cat. No. 4391851C, Cells-to-C<sub>T</sub> Bulk Lysis Reagents, is identical to lysis reagents in the TaqMan Fast Advanced Cells-to-C<sub>T</sub> Kit, the SYBR Green Fast Advanced Cells-to-C<sub>T</sub> Kit, and the TaqMan Gene Expression Cells-to-C<sub>T</sub> Kit.

‡ Cat. No. 4391852C, Cells-to-C<sub>T</sub> Bulk RT Reagents, is compatible with the TaqMan Fast Advanced Cells-to-C<sub>T</sub> Kit and the TaqMan Gene Expression Cells-to-C<sub>T</sub> Kit.

## Ordering information

Description	Quantity	Cat. No.
<b>Specialty Cells-to-C<sub>T</sub> products</b>		
TaqMan MicroRNA Cells-to-C <sub>T</sub> Kit	100 reactions	4391848
Single Cell-to-C <sub>T</sub> Kit	50 reactions	4458237
	100 reactions	4458236
<b>Stabilized Blood-to-C<sub>T</sub> Nucleic Acid Preparation Kits for qPCR</b>		
Stabilized Blood-to-C <sub>T</sub> Nucleic Acid Preparation Kit for qPCR, compatible with Tempus and PAXgene Blood RNA Tubes	50 reactions	4449079 <sup>§</sup>
Stabilized Blood-to-C <sub>T</sub> Nucleic Acid Preparation Kit for qPCR, compatible with Tempus Blood RNA Tubes	200 reactions	4449080
Stabilized Blood-to-C <sub>T</sub> Nucleic Acid Preparation Kit for qPCR, compatible with PAXgene Blood RNA Tubes	200 reactions	4449082

§ Cat. No. 4449079 is a starter kit that contains reagents for both Applied Biosystems™ Tempus™ and PAXgene™ (Becton, Dickinson) Blood RNA Tubes.

 Find out more at [thermofisher.com/cellstoc](https://thermofisher.com/cellstoc)

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