



**Informational:**



Pair your qPCR Master Mix with ready to use TaqMan Gene Expression, Genotyping Assay or [Custom Probes](#) for multiplexing. Use our helpful [TaqMan Search Wizard](#) to find the Assays for your target of interest. [Learn more](#)



[Certificates](#)

[SDS](#)

Applied Biosystems™

## TaqPath™ 1-Step RT-qPCR Master Mix, CG

TaqPath 1-Step RT-qPCR Master Mix, CG, is designed for robust and reproducible one-step pathogen detection and gene expression workflows. The single-tube 4X formulation contains thermostable MMLV reverse transcriptase, dNTPs, UNG, ROX dye, and thermostable Fast DNA polymerase.

Have Questions? [Contact Us](#)

Change view



Catalog Number	Quantity
<a href="#">A15299</a>	5 x 1 mL

Catalog number A15299 ★

Price (MDL)

-

[Contact Us](#)

Quantity:

5 x 1 mL

[Product Overview](#)[Ask our AI about this Product](#)[FAQ](#)[Figures](#)[Documents](#)

TaqPath 1-Step RT-qPCR Master Mix, CG, is designed for robust and reproducible one-step pathogen detection and gene expression workflows. The single-tube 4X formulation contains thermostable MMLV reverse transcriptase, dNTPs, UNG, ROX dye, and thermostable Fast DNA polymerase, facilitating easy reaction set up—just add user-supplied assay and sample (Figure 1). All manufacturing lots are functionally tested to ensure remarkable lot-to-lot reproducibility for CT consistency and dynamic range across a wide variety of assays. TaqPath 1-Step RT-qPCR Master Mix, CG, is a General Purpose Reagent (GPR) is labeled 'For Laboratory Use' and, manufactured in an ISO 13485-certified and FDA-registered facility that adheres to cGMP principles. With stringent quality coupled with premier performance, TaqPath 1-Step RT-qPCR Master Mix, CG, is a superior choice for your diagnostic or biopharmaceutical testing and development needs.

Features of the TaqPath 1-Step RT-qPCR Master Mix, CG, include:

- **High sensitivity** to detect low-copy targets with reproducible CT results
- **6 logs of dynamic range** with RNA, DNA, and multiplexing applications
- **Tolerance of inhibitors** commonly found in clinical and biopharma samples
- **Advanced manufacturing** production and process controls ensure lot-to-lot consistency
- **Compliance Package** containing most frequently requested compliance documents, available below, commonly used to comply with internal quality systems and regulatory requirements in molecular diagnostic assay and drug development

### High Sensitivity

With understanding of the importance of reproducible detection for low-titer pathogen or transcripts in clinical diagnostic testing, bioprocess QC testing, and adventitious testing, TaqPath 1-Step RT-qPCR Master Mix, CG, has been optimized as a higher-concentration 4X master mix that allows you to input more sample into each reaction, increasing sensitivity even in low-volume reactions. Figure 2 shows consistent CT results obtained from three unique lots when detecting 10 copy inputs of RNA target. Figure 3 demonstrates CT lot-to-lot consistency is preserved across multiple assays with different attributes and expression levels.

### Wide Dynamic Range Compatible with RNA, DNA, and Multiplexing

TaqPath 1-Step RT-qPCR Master Mix, CG, has been optimized to provide high specificity and dynamic range for use with RNA and DNA targets. Since virology labs often test for both RNA and DNA viruses, TaqPath 1-Step RT-qPCR Master CG, is designed to use a single protocol to assay both types of nucleic acid. This input flexibility can help streamline the

TaqPath 1-Step RT-qPCR Master Mix performance in a triplex reaction. The formulation can be run in either fast or standard cycling conditions with equivalent performance across a wide variety of qPCR platforms.

TaqPath 1-Step RT-qPCR Master Mix, CG, has been benchmarked against similar competitor master mixes and demonstrates equivalent or better sensitivity and dynamic range across a variety of targets (Figure 6).

**Inhibitor Tolerant**

Unlike other master mixes on the market, TaqPath 1-Step RT-qPCR Master Mix's unique proprietary formulation allows robust performance even in the presence of PCR inhibitors typically found in biopharmaceutical, molecular diagnostics, and research applications. Optimized performance in the presence of such substances that can normally inhibit PCR, such as heparin, hematin, or EDTA, helps increase confidence when working with a variety of complex clinical or biopharma samples. TaqPath master mixes demonstrate increased tolerance of inhibitors compared to competitor mixes (Figure 7).

**Manufacturing Production and Process Controls**

TaqPath qPCR Master Mix is manufactured under a strong quality management system that utilizes traceable quality raw materials and validated operating procedures. With established controls from purchasing through QC release, TaqPath product manufacturing is designed to produce consistent product performance lot after lot. The stringent QC is important for a variety of applications, making the master mix ideal for bioprocess quality control testing, biologics adventitious testing, molecular diagnostics, and research applications.

**General Purpose Reagent manufactured under cGMP**

TaqPath master mixes are general purpose reagents labeled 'For Laboratory Use' and manufactured in an ISO 13485-certified and FDA-registered facility that adheres to cGMP principles.

For Laboratory Use.

<b>Specifications</b>	
<b>Fidelity (vs. Taq)</b>	4 X
<b>For Use With (Equipment)</b>	7500 Fast System, 7500 System, 7900HT System, QuantStudio™ 12k Flex, QuantStudio™ 3, QuantStudio™ 5, QuantStudio™ 6 Flex, QuantStudio™ 7, StepOne™, StepOnePlus™, ViiA™ 7 System, 7500 Fast Dx System, QuantStudio™ Dx
<b>Format</b>	Tube
<b>Hot Start</b>	Built-In Hot Start
<b>Includes</b>	dUTP, UNG/UDG
<b>Inhibitor Tolerance (Simple)</b>	High
<b>Multiplex Capability</b>	Up to 3-plex
<b>No. of Reactions</b>	1000 Reactions

<b>Product Line</b>	TaqPath
<b>Product Type</b>	RT-qPCR Master Mix
<b>Quantity</b>	5 x 1 mL
<b>Reverse Transcriptase</b>	M-MLV
<b>Sample Type</b>	RNA, cDNA, DNA
<b>Sensitivity</b>	Down to 10 copies
<b>Sufficient For</b>	1000 Reactions
<b>Target Specificity</b>	RNA only, Both RNA and DNA
<b>Thermostability</b>	Not Applicable
<b>Volume</b>	1 mL
<b>Concentration</b>	4X
<b>Detection Method</b>	Primer-probe
<b>For Use With (Application)</b>	Microbial Detection, DNA Quantification, Presence/Absence
<b>Form</b>	Liquid
<b>GC-Rich PCR Performance</b>	High
<b>PCR Method</b>	1-step RT-qPCR
<b>Reaction Speed</b>	Fast or Standard
<b>Unit Size</b>	Each

### Contents & Storage

Contains 5 x 1 mL tubes of 4X RT-PCR master mix sufficient for 1000 x 20 µL reactions.

Store at -15°C to -25°C in the dark.



## TaqPath Compliance Package

In an effort to efficiently support your compliance needs, frequently requested compliance documents are available here:

- [Statement of Quality](#) relating to the current good manufacturing practices (cGMP) to which TaqPath master mixes adhere
- Detailed lot-specific Certificate of Analysis (COA) (see below in Documents & Downloads section)
- [Product Stability Statement](#)
- Supplier Evaluation Support
  - Completed [Self Assessment](#)
  - [ISO certificates](#) by manufacturing site
- For EU Reach compliance-related inquiries, email [LSGChemicalCompliance@thermofisher.com](mailto:LSGChemicalCompliance@thermofisher.com)
- [BSE/TSE Statement](#)
- Change Control and Notification [Registration](#)

Not finding the compliance document you're looking for? [Technical Support](#) is here to help



## Have questions about this product? Ask our AI assisted search.

Q Ask a question about this product.

This is an AI-powered search and may not always get things right. You can help us make it better with a thumbs up or down on individual answers or by selecting the "Give feedback" button. Your search history and customer login information may be retained by Thermo Fisher and processed in accordance with our [Privacy Notice](#).

## Frequently asked questions (FAQs)

What is the recommended RNA input range for TaqPath 1-Step RT-qPCR Master Mix, CG (Cat. Nos. A15299, A15300)?



at starting template can I use with the TaqPath 1-Step RT-qPCR Master Mix?



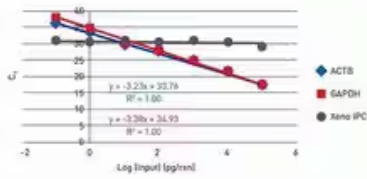


Figure 5. Optimized for multiplexing

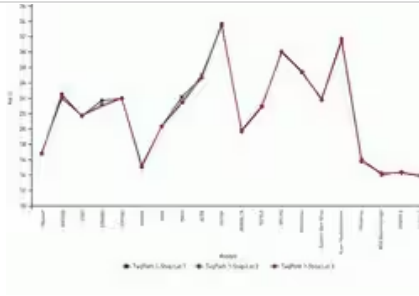


Figure 3. Ct consistency across multiple assays

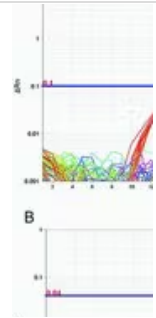


Figure 4. I range of 1 RT-qPCR

## Documents & Downloads

### Certificates

Search by lot number or partial lot number

Search

Lot #	Certificate Type	Date	Catalog Number(s)
3489716	Certificate of Analysis	May 22, 2026	A15299
3463069	Certificate of Analysis	May 14, 2026	A15300
3461181	Certificate of Analysis	May 13, 2026	A15299
3461180	Certificate of Analysis	Apr 09, 2026	A15299
3460923	Certificate of Analysis	Apr 03, 2026	A15299

5 results displayed, search above for a specific certificate

[Request a Certificate](#)

### Safety Data Sheets



---

## Manuals





-  [User Guide: TaqPath 1-Step RT-qPCR Master Mix, CG](#)
-  [快速参考手册: TaqPath 1-Step RT-qPCR Master Mix, CG 简要操作说明 \(Quick reference\)](#)
-  [TaqPath™ 1-Step RT-qPCR Master Mix GC Product Insert](#)

---

## Warranties





-  [Product Bulletin: TaqPath general purpose reagents](#)
-  [Product Bulletin: Confidence in clinical testing—TaqPath general purpose reagents](#)

## Scientific Resources

---

### Reference Materials



-  [Notification: Supplier Information for TaqPath Master Mixes](#)
-  [Manufacturing Update for the TaqPath 1-Step RT-qPCR Master Mix](#)

## Limited Use Label Licenses (LULL)

---

License #475 - General Purpose Reagents

