

Lyo-Ready™ Inhibitor-Tolerant RT-qPCR Mix

Product Handling Guide

Shipping:	Blue Ice
Catalog number:	MDX185
Batch No.:	See vial
Concentration:	4x

Store at -20 °C



Storage and stability:

Lyo-Ready™ Inhibitor-Tolerant RT-qPCR Mix is shipped on blue ice. On arrival store at -20 °C for optimum stability. Repeated freeze/thaw cycles should be avoided. Thawing during transportation does not affect the product performance. Solutions should be mixed/equilibrated after each thawing to avoid phasing.

Expiry:

When stored under the recommended conditions and handled correctly, full activity of the kit is retained until the expiry date on the outer box label.

Safety precautions:

Read and understand the SDS (Safety Data Sheets) before handling the reagents. Hardcopies of the SDS will be provided with the first shipment, thereafter they will be available upon request.

Quality control:

Meridian operates under ISO 13485 Quality Management System. Lyo-Ready™ Inhibitor-Tolerant RT-qPCR Mix and its components are extensively tested for activity, processivity, efficiency, heat activation, sensitivity, absence of nuclease contamination and absence of nucleic acid contamination.

Notes:

For research or further manufactured use only.

Description

Lyo-Ready™ Inhibitor-Tolerant RT-qPCR Mix is a glycerol-free, one tube formulation combining the latest advances in buffer chemistry and PCR enhancers, together with an optimized concentration of reverse transcriptase, antibody-mediated hot-start polymerase, dNTPs and MgCl₂. Lyo-Ready™ Inhibitor-Tolerant RT-qPCR Mix has been designed for highly reproducible, accurate RNA and DNA target amplification, delivering excellent results in multiplex assays, even in the presence of difficult inhibitors found in blood, sputum or stool samples. In order to produce room temperature lyophilized RT-qPCR reagents, assay specific primers and probes can be added to Lyo-Ready™ Inhibitor-Tolerant RT-qPCR Mix for subsequent lyophilization.

Kit components

Table 1

Component
Lyo-Ready™ Inhibitor-Tolerant RT-qPCR Mix, 4x

Users Guidelines

Master mix preparation

Recommended reagent volumes per 20 µL RT-qPCR mix are given in Table 2.

Table 2

Reagent	Volume
Lyo-Ready™ Inhibitor-Tolerant RT-qPCR Mix, 4x	5 µL
Primer-Probe Mix, 20x	1 µL*
Water	x µL
Total volume	Up to 20 µL

* Primer and probe concentration needs be optimized

Dispense into reaction vials and immediately transfer into a freeze-dryer and run a suitable drying cycle.

For long-term storage at ambient temperatures, the lyophilized product from the freeze-dryer should be packaged with a silica sachet in a heat sealed pouch at low relative humidity conditions.

Assay setup

Rehydrate the lyophilized RT-qPCR master mix in the reaction vials with 20 µL template-containing solution and run RT-qPCR.

The RT-qPCR conditions in Table 3 are suitable for amplicons of up to 200 bp. These cycling parameters have been optimized for Lyo-Ready™ Inhibitor-Tolerant RT-qPCR Mix on a number of platforms, however they can be varied to suit different machine-specific protocols.

Table 3

Step	Temperature	Time	Cycles
Reverse transcription*	50 °C	10 min	1
Polymerase activation	95 °C	2 min	1
Denaturation	95 °C	5 s	45
Annealing/Extension*	60 °C	20 s	

* When multiplexing, the reverse transcription reaction time can be extended up to 20 minutes and the annealing/extension time can be extended up to 60 seconds and/or the annealing/extension temperature can be increased up to 65° C.

Technical Support

For any technical enquiries, please contact our Technical Support team via email at: mbi.tech@meridianlifescience.com