Air-Dryable™ Direct RNA/DNA qPCR Stool

Product Handling Guide

Shipping:	Blue Ice
Catalog number:	MDX141
Batch No.:	See vial
Concentration:	4x

Store at –20 °C

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Storage and stability:
Air-Dryable™ Direct RNA/DNA qPCR Stool is shipped 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 Bioscience operates under ISO 13485 Quality Management System. Air-Dryable™ Direct RNA/DNA qPCR Stool 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

Air-Dryable™ Direct RNA/DNA qPCR Stool is a glycerol-free one tube formulation combining the latest advances in buffer chemistry and PCR enhancers, together with an optimized concentration of antibody-mediated hot-start polymerase, reverse transcriptase, RNase Inhibitor, dNTPs and $MgCl_2$. Air-Dryable™ Direct RNA/DNA qPCR Stool has been designed for highly reproducible, accurate RNA and DNA target amplification, delivering excellent results in multiplex assays, even in the presence of crude stool extract. In order to produce room temperature air-dried RT-qPCR reagents, assay specific primers and probes can be added to Air-Dryable™ Direct RNA/DNA qPCR Stool for subsequent air-drying.

Kit components

Table 1

Component
Air-Dryable™ Direct RNA/DNA qPCR Stool, 4x

Users Guidelines

Master mix preparation

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

Table 2

Reagent	Volume
Air-Dryable™ Direct RNA/DNA qPCR Stool, 4x	5 µL
Primer-Probe Mix, 20x	1 µL*
Total volume	**6 µL**

** Primer and probe concentration need be optimized*

Dispense into reaction vessels, immediately transfer into a convection oven and run a suitable drying cycle.

For long-term storage at ambient temperatures, the air-dried product should be packaged with a silica sachet in a heat sealed pouch.

Assay setup

Rehydrate the air-dried RT-qPCR master mix in the reaction vials with 20 µL template-containing solution, vortex and run RT-qPCR.

The qPCR conditions in Table 3 are suitable for amplicons of up to 200 bp. These cycling parameters have been optimized for Air-Dryable ™ Direct RNA/DNA qPCR Stool on a number of platforms, however they can be varied to suit different detection assay and 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.*

Associated products

Product	Cat. No.
Air-Dryable™ qPCR Mix	MDX082
Air-Dryable™ 1-Step RT-qPCR Mix	MDX095
Air-Dryable™ Direct DNA qPCR Blood	MDX092
Air-Dryable™ Direct RNA/DNA qPCR Saliva	MDX131

Technical Support

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

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