

Air-Dryable Direct DNA qPCR Blood

Product Handling Guide

Shipping:	On Dry/Blue Ice
Catalog number:	MDX092
Batch No.:	See vial
Concentration:	4x

Store at **-20 °C**



Storage and stability:

Air-Dryable Direct DNA qPCR Blood is shipped on dry/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. Air-Dryable Direct DNA qPCR Blood 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 DNA qPCR Blood is a glycerol-free qPCR mix containing Taq polymerase, reaction buffer, dNTPs, MgCl₂ and air-dry compatible excipients. In order to produce room temperature air-dried qPCR reagents, assay specific primers and probes can be added to Air-Dryable qPCR Mix for subsequent air-drying.

The mix has been developed to tolerate the effects of the inhibitors present in blood and derivatives, such as plasma and serum. For this reason, the dried pellet can be rehydrated with samples or buffers containing blood or inhibitors deriving from crude extraction of blood samples.

Kit components

Table 1

Component
Air-Dryable Direct DNA qPCR Blood , 4x

Users Guidelines

The amount of inhibition tolerated by Air-Dryable Direct DNA qPCR Blood is variable depending on several factors, including assay design and sample quality. For this reason, an initial sample titration is recommended.

Master mix preparation

Recommended reagent volumes of Air-Dryable Direct DNA qPCR Blood and Primer-Probe Mix for air-drying are given in Table 2. Volumes are indicated per 20 µL final rehydrated reaction.

Table 2

Reagent	Volume
Air-Dryable Direct DNA qPCR Blood , 4x	5 µL
Primer-Probe Mix, 20x	1 µL*
Total Volume	6 µL

* Primer and probe concentration needs to be optimised

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 from the oven should be packaged with silica desiccant in a heat sealed pouch.

Assay setup

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

The qPCR conditions in Table 3 are suitable for amplicons of up to 200 bp. These cycling parameters are compatible with Air-Dryable Direct DNA qPCR Blood 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
Polymerase activation	95 °C	3 min	1
Denaturation	95 °C	10 s	45
Annealing/Extension	60 °C	25 s	

Associated Products

Product	Cat. No.
Air-Dryable qPCR Mix	MDX082
Air-Dryable 1-Step RT-qPCR Mix	MDX095
Inhibitor-Tolerant qPCR Mix	MDX013
Inhibitor-Tolerant RT-qPCR Mix	MDX016
Lyo-Ready qPCR Mix	MDX021
Lyo-Ready 1-Step RT-qPCR Mix	MDX024

Technical Support

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