

Lyo-Ready™ Direct DNA qPCR Blood

Product Handling Guide

Shipping:	On Dry/Blue Ice
Catalog number:	MDX0122
Batch No.:	See vial
Concentration:	4x

Store at -20 °C



Storage and stability:

Lyo-Ready™ 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. Lyo-Ready™ 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

Lyo-Ready™ Direct DNA qPCR Blood 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, dNTPs and MgCl₂. Lyo-Ready™ Direct DNA qPCR Blood has been designed for highly reproducible, accurate DNA target amplification, delivering excellent results in multiplex assays in the presence of whole blood treated with different anticoagulants. In order to produce room temperature lyophilized qPCR reagents, assay specific primers and probes can be added to Lyo-Ready™ Direct DNA qPCR Blood for subsequent lyophilization.

Kit components

Table 1

Component
Lyo-Ready™ Direct DNA qPCR Blood, 4x

Users Guidelines

The amount of inhibition tolerated by Lyo-Ready™ 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 Lyo-Ready™ Direct DNA qPCR Blood and Primer–Probe Mix for lyophilization are given in Table 2. Volumes are indicated per 20 µL final rehydrated reaction.

Table 2

Reagent	Volume
Lyo-Ready™ Direct DNA qPCR Blood, 4x	5 µL
Primer–Probe Mix, 20x	1 µL*
Water	x µL
Total Volume	Up to 20 µL

* Primer and probe concentration needs to be optimised

Dispense into reaction vessels, 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 silica desiccant in a heat sealed pouch at low relative humidity conditions.

Assay setup

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

The qPCR conditions in Table 3 are suitable for amplicons of up to 200 bp. These cycling parameters have been optimized for Lyo-Ready™ Direct DNA qPCR Blood on a number of platforms, however they can be varied to suit different 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	

*When multiplexing, 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

Component	Cat. No
Air-Dryable™ Direct DNA qPCR Blood	MDX092
Air-Dryable™ Direct RNA/DNA qPCR Blood	MDX121
Lyo-Ready™ Direct RNA/DNA qPCR Blood	MDX123
Lyo-Ready™ Direct DNA qPCR Saliva	MDX132
Lyo-Ready™ Direct RNA/DNA qPCR Saliva	MDX133

Technical Support

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