# Lyo-Ready qPCR Buffer w/o Excipients, 4x Product Handling Guide

Shipping: On Dry or Blue Ice

Catalog number: MDX061

Batch No.: See vial
Concentration: 4x

Store at -20 °C



#### Storage and stability:

Lyo-Ready qPCR Buffer w/o Excipients is shipped on dry or 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

Bioline operates under ISO 13485 Quality Management System. Lyo-Ready qPCR Buffer w/o Excipients and its components are extensively tested for activity, processivity, efficiency, heat activation sensitivity, absence of nuclease contamination and absence of nucleic acid contamination.

#### Notes:

This reagent has been manufactured under 13485 Quality Management System and is suitable for further manufacturing use as an IVD component.

## Description

Lyo-Ready qPCR Buffer w/o Excipients is a glycerol-free qPCR reaction buffer that allows formulation optimization to freeze-drying methods by excipients selection. In order to produce room temperature lyophilized qPCR reagents, lyo-excipients, a lyo-compatible Taq DNA polymerase, assay specific primers and probes are added to Lyo-Ready Buffer for subsequent freeze-dry.

## Kit components

#### Table 1

## Component

Lyo-Ready qPCR Buffer w/o Excipients, 4x

## **Users Guidelines**

## Master mix preparation

Recommended reagent volumes per 20  $\mu$ L qPCR mix are given in Table 2.

## Table 2

Reagent	Volume
Lyo-Ready qPCR Buffer w/o Excipients, 4x	5 µL
Lyo-compatible Taq DNA polymerase*	x µL
Lyo-Excipients*	x µL
dNTP Mix, 100 mM*	0.8 μL
MgCl <sub>2</sub> , 200 mM*	0.6 μL
Primer-Probe Mix, 20x	1 μL
Water	x μL
Total Volume	Up to 20 μL

<sup>\*</sup> Assay-dependent optimization is suggested . Lyo-excipients are required in order to produce a lyo-compatible qPCR Mix

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 at low relative humidity conditions.

## **Assay setup**

Rehydrate the lyophilized qPCR mix in the reaction vials with 20  $\mu$ L 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 qPCR Buffer 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	2 min	1
Denaturation	95 °C	5 s	45
Annealing/Extension	60 °C	20 s	40

Related Products	Cat. No.
Glycerol-Free Taq HS 50U/µL	MDX011
Lyo-Ready qPCR Buffer, 2.5x	MDX022
Lyo-Compatible MMLV-RT	MDX042
dNTP Mix, 100mM	MDX051

## **Technical Support**

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

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