

# Lyo-Ready qPCR Buffer 2.5x

## Product Handling Guide

Shipping: On Dry or Blue Ice  
Catalog number: MDX022  
Batch No.: See vial  
Concentration: 2.5x

Store at -20 °C



### Storage and stability:

Lyo-Ready qPCR Buffer 2.5x 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 2.5x is 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 2.5x is a glycerol-free qPCR reaction buffer containing lyo-exipients. In order to produce lyophilized, ambient-temperature stable qPCR reagents, dNTP, MgCl<sub>2</sub> and glycerol-free Taq DNA polymerase must be added prior to lyophilization.

## Kit components

Table 1

Component
Lyo-Ready qPCR Buffer, 2.5x

## Users Guidelines

### Master mix preparation

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

Table 2

Reagent	Volume
Lyo-Ready qPCR Mix, 2.5x	8 µL
Glycerol-free Taq DNA polymerase*	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
<b>Total volume</b>	<b>Up to 20 µL</b>

\* Assay-dependent optimization is suggested

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 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 qPCR Buffer 2.5x 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	

Related Products	Cat. No.
Glycerol-Free Taq HS 50U/µL	MDX011
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](mailto:mbi.tech@meridianlifescience.com)

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