

Fast qPCR Buffer, 4x

Product Handling Guide

Shipping:	On Dry or Blue Ice
Catalog number:	MDX033
Batch No.:	See vial
Concentration:	4x

Store at -20 °C



Storage and stability:

Fast qPCR Buffer 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. Fast qPCR Buffer 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

Fast qPCR Buffer is a combination of the latest advances in buffer chemistry together with enhancers and stabilizers. The final mix still requires addition of dNTPs and MgCl₂. Fast qPCR Buffer has been designed for highly reproducible, accurate assay results under fast thermal cycling conditions, delivering excellent results in fast qPCR assays.

Kit components

Table 1

Component
Fast qPCR Buffer, 4x

Users Guidelines

Master mix preparation

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

Table 2

Reagent	Volume
Fast qPCR Buffer, 4x	5 µL
MgCl ₂ Solution, 50 mM*	2.4 µL
dNTP Mix Solution, 100 mM**	0.2 µL
Taq DNA Polymerase***	1 µL
Primer-Probe Mix, 20x	1 µL
Template****	Up to 9 µL
Water	As required
Total volume	Up to 20 µL

*The described amount of MgCl₂ is indicative.

**We recommend using a high-quality dNTP Mix, such as dNTP Mix, 100mM MDX051

***We recommend using a high-quality polymerase such as Taq HS DNA Polymerase MDX008

****Use up to 1 µg of complex (e.g. eukaryotic) genomic DNA or 100 ng cDNA in a single PCR

Assay setup

The qPCR conditions in Table 3 are suitable for amplicons of up to 200 bp. These cycling parameters have been optimized for Fast qPCR 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 [†]	

[†]Up to 50 s may be necessary for multiplexing with more than two probes

Related Products	Cat. No.
Taq HS DNA Polymerase	MDX008
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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