

Product Manual Cat. No: #Trial-4501

# RT-qPCR Lyo-Ready Mix FOR TRIAL

#### **Description**

RT-qPCR Lyo-Ready Mix FOR TRIAL is a universal one-step probe product designed for evaluating the RT-qPCR Lyo-Ready Mix (#4501) performance before committing to large-scale lyophilization projects. This trial version is intended for performance testing only and is not fully lyophilization-ready.

Unlike the standard RT-qPCR Lyo-Ready Mix (#4501), which includes the 10,000× lyophilization-ready reverse transcriptase (RTase Lyo) and two dilution buffers, this trial kit provides the RTase Lyo in a diluted 20x format, well suited for performance testing. It delivers the same robust, sensitive, and fast RT-qPCR performance, but is not suitable for lyophilization.

If lyophilization studies are required, we recommend using the RT-qPCR Lyo-Ready Mix (#4501), which is specifically optimized for that application.

The mix features state-of-the-art technology, including an antibody-regulated hot-start Taq polymerase, optimized buffer chemistry, PCR enhancers, RNase inhibitor and stabilizers, enabling efficient cDNA synthesis and real-time PCR amplification in a single tube.

Compatible with a range of probe chemistries such as TaqMan® and Scorpions®, this trial mix supports rapid detection and quantification of diverse RNA targets, including mRNA, viral RNA, and total RNA.

This trial format is supplied in a size suitable for evaluation (125 reactions) making it easier and more cost-effective to assess assay performance before scaling up for lyophilization testing.

## Kit Components

Component	Volume	
RT-qPCR Lyo-Ready Mix (2x)	1 x 1.25 mL	
RTase Lyo (20x)	1 x 0.125 mL	

#### Storage and Shipment

Transport with an ice pack. The reagents should be stored at -20°C upon arrival. The reagents are stable until the expiration date if stored correctly.

#### Reaction Master Mix Set-Up

The recommended master mix set-up for a 20  $\mu$ L reaction volume is shown in the table below.

Reagent	Volume (μL)	Final concentration	
RT-qPCR Lyo- Ready Mix (2x)	10	1x	
∞Forward primer (10 μM)	X 100–500 nM		
∞Reverse primer (10 µM)	x	100–500 nM	
∞Probe (10 µM)	X 50–250 nM		
RTase Lyo (20x)	1	1x	
RNA template	2–8	Variable	
Nuclease-free Water	Up to 20 µL final volume		

∞Primers and probes should be specific to the target DNA/RNA of interest. The recommended Tm for primers is between 56°C and 60°C, and the Tm for probes should be between 65°C and 70°C.

## **Instrument and Program Set-Up**

Cycles	Steps	Temperature	Time
1	Reverse transcription	50°C	10 min
1	Polymerase activation	95°C	1 min
40	Denaturation	95°C	5 sec
	Annealing/ Extension	60°C	20 sec



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### **Technical information and support**

For technical enquiries or assay development support, please contact us via e-mail at: <a href="mdx@medixbiochemica.com">mdx@medixbiochemica.com</a>. Additional information and technical resources are available on our website at: info.medixbiochemica.com/resources.