

# BlitzAmp qPCR Master Mix

- Turbocharge your Research with Lightning Fast PCR

MiRXES formulated BlitzAmp qPCR Master Mix to support research and routine testing requirements for high specificity, sensitivity, robustness and speed. Its proprietary blend of PCR polymerase, dNTPs, DNA binding dye, salts and stabilizers is the ideal molecular solution to generate high-quality data in the shortest time with ease.

Robust amplification of amplicon up to 250bp for difficult assays
Sensitive detection of low abundance targets
Highly reproducible data
Highly stable at room temperature
High tolerance for inhibitors and varying assay melting temperature
Highly versatile; designed to support most real-time qPCR machines in the market



## Generate top Quality data in a Flash

MiRXES BlitzAmp qPCR Master Mix is designed to support high-throughput setups. Its short run time translates into high productivity and substantial capital instrument investment savings. Maximize qPCR machine time and increase productivity by 3 to 5 X by leveraging on MiRXES' Fast and Lightning cycling protocols.

Cycling Protocol	Time* (min)	Time Savings	No. of Plates in 3 hours	Productivity
Standard Cycling	90	-	1.99	-
MiRXES Fast Cycling	57	37%	3.16	300%
MiRXES Lightning Cycling	34	62%	5.24	500%

Table 1. Comparison table for three different cycling protocols on time required, time savings, number of plates that could be run in 3 hours and % increase in productivity. With shorter run time, MiRXES Fast cycling and Lightning cycling protocol increased productivity over standard cycling protocol by 300% and 500%, respectively. \* Total time required for a PCR run of 40 cycles.

## Fast and Robust

MiRXES BlitzAmp Master Mix supports robust amplification of amplicons up to 250 bp using Lightning cycling protocol for accurate quantification in just 34 min.

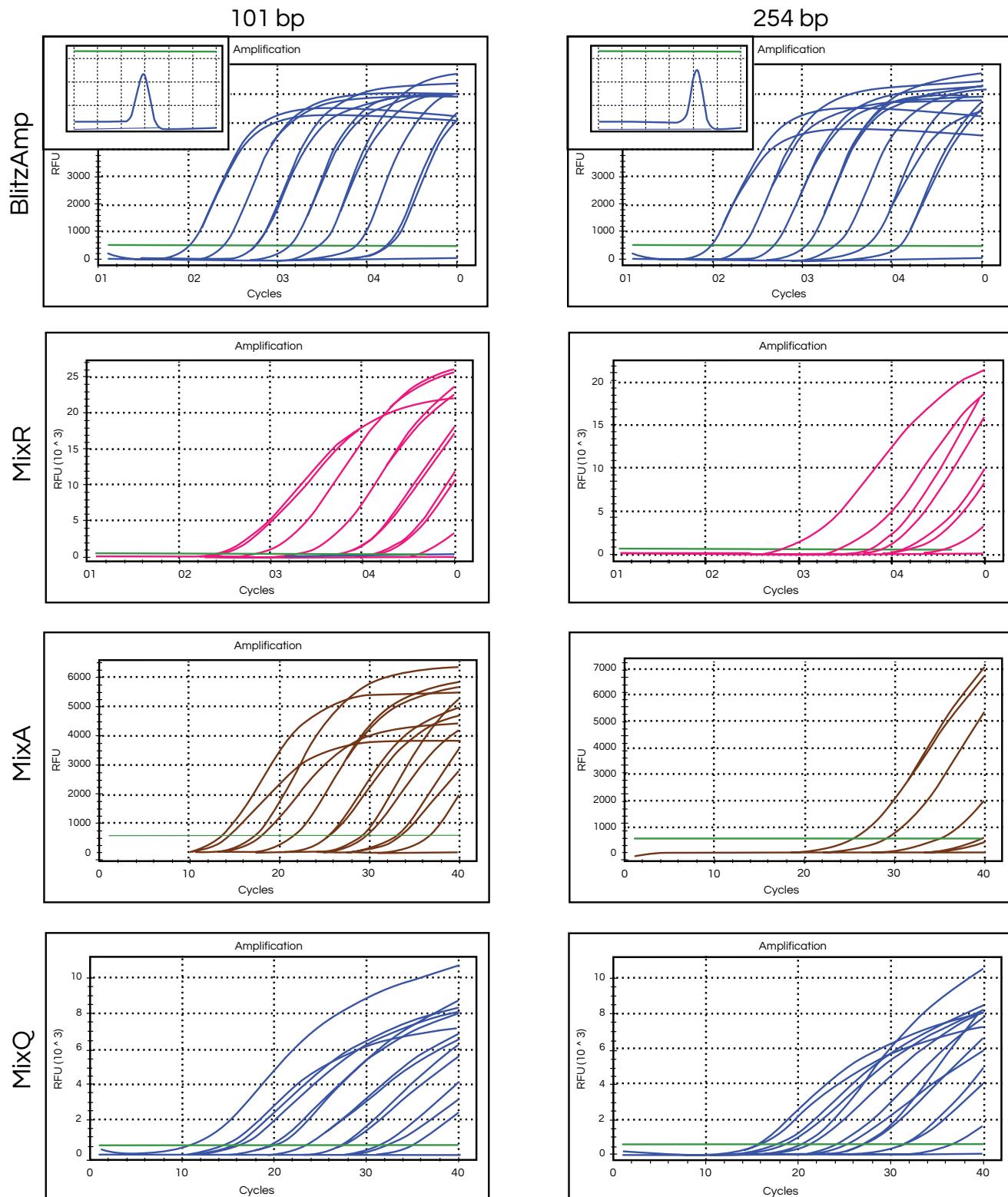


Figure 1. Robustness comparison of MiRXES BlitzAmp qPCR Master Mix against major competitors (i.e., Vendors R, A and Q). Amplicons of lengths 101 bp and 254 bp were amplified using qPCR Master Mixes from the various vendors using the Lightning thermal cycling protocol (i.e., Hot start 95°C/5 min, denaturation 98°C/1 s, annealing/extension 60°C/5 s, for 40 cycles, total 34 min run time). In just 34 min run time, MiRXES BlitzAmp Master Mix outperformed all the other Master Mixes in supporting efficient PCR amplification of up to 254 bp amplicon. Initial concentrations ranged from  $5 \times 10^1$  to  $5 \times 10^7$  copies per reaction.

## Reaction Stability

Reactions set up with MiRXES BlitzAmp qPCR Master Mix can be stored at room temperature for up to 96 hours with neither decrease in performance nor increase in non-specific signals, making it ideal for high throughput laboratory setups.

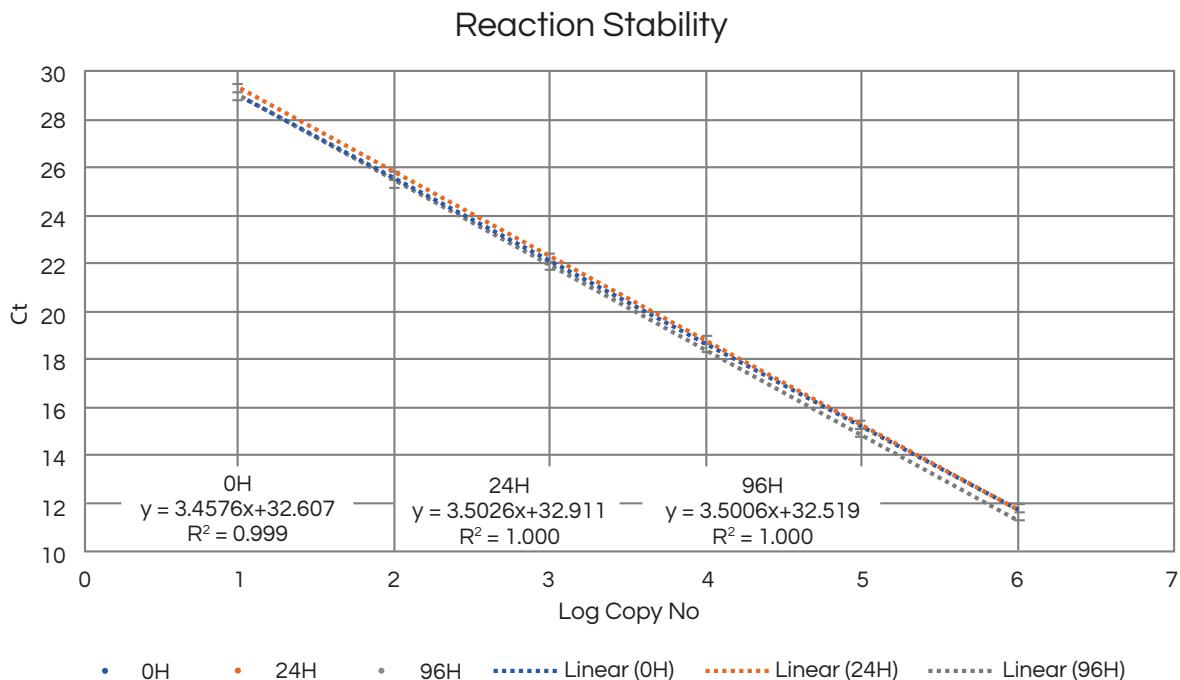


Figure 2. Reaction mixes containing BlitzAmp qPCR Master Mix were left at room temperature after set up for up to 96 hours prior to qPCR to demonstrate superior reagent stability. Data showed that qPCR efficiency was maintained between 95-96% and Ct values were virtually identical for all conditions tested (standard deviations plotted above). No signals from NTC wells was detected.

## Compatible with most Real-time qPCR machines

With different concoctions (i.e., low/high ROX) available, MiRXES BlitzAmp qPCR Master Mix is designed to support most real-time qPCR machines in the market.

Table 2. Covers the Real-time qPCR instruments that are compatible with BlitzAmp qPCR Master Mix, their ROX requirement and the catalogue numbers of the qPCR Master Mix for ordering.

Real-time PCR Instrument	ROX requirement	BlitzAmp qPCR Master Mix (Rxn)
<ul style="list-style-type: none"> <li>Bio-Rad® iQ™5, CFX96, CFX384, Opticon</li> <li>Roche Lightcycler®</li> <li>Qiagen Rotor-Gene™</li> <li>Eppendorf Mastercycler®</li> <li>Cepheid® SmartCycler®</li> <li>MIC qPCR</li> </ul>	Not required	1204202 (200) 1204204 (800) 1204205 (1200) 1204206 (2400)
<ul style="list-style-type: none"> <li>Applied Biosystems® 7500, QuantStudio™,</li> <li>ViiA7™</li> <li>Agilent Mx™</li> </ul>	Low ROX	
<ul style="list-style-type: none"> <li>Applied Biosystems® 7000, 7300, 7700, 7900HT, StepOne™, StepOnePlus™</li> </ul>	High ROX	1204212 (200) 1204214 (800) 1204215 (1200) 1204216 (2400)

## Purchasing information

Product	Description	Cat. No.
BlitzAmp Hotstart qPCR Master Mix (200)	2 x 1,000 µl of BlitzAmp Hotstart qPCR Master Mix (2x), 200 x 20 µl reactions	1204202
BlitzAmp Hotstart qPCR Master Mix (800)	8 x 1,000 µl of BlitzAmp Hotstart qPCR Master Mix (2x), 800 x 20 µl reactions	1204204
BlitzAmp Hotstart qPCR Master Mix (1200)	12 x 1,000 µl of BlitzAmp Hotstart qPCR Master Mix (2x), 1200 x 20 µl reactions	1204205
BlitzAmp Hotstart qPCR Master Mix (2400)	24 x 1,000 µl of BlitzAmp Hotstart qPCR Master Mix (2x), 2400 x 20 µl reactions	1204206
BlitzAmp Hotstart qPCR Master Mix - HI-ROX (200)	2 x 1,000 µl of BlitzAmp Hotstart qPCR Master Mix (2x), 200 x 20 µl reactions, For High-Rox qPCR instruments	1204212
BlitzAmp Hotstart qPCR Master Mix - HI-ROX (800)	8 x 1,000 µl of BlitzAmp Hotstart qPCR Master Mix (2x), 800 x 20 µl reactions, For High-Rox qPCR instruments	1204214
BlitzAmp Hotstart qPCR Master Mix - HI-ROX (1200)	12 x 1,000 µl of BlitzAmp Hotstart qPCR Master Mix (2x), 1200 x 20 µl reactions, For High-Rox qPCR instruments	1204215
BlitzAmp Hotstart qPCR Master Mix - HI-ROX (2400)	24 x 1,000 µl of BlitzAmp Hotstart qPCR Master Mix (2x), 2400 x 20 µl reactions, For High-Rox qPCR instruments	1204216
BlitzAmp cDNA Synthesis System (20)	For 20 x 20 µl cDNA reactions, 1 x 20 µl of BlitzAmp Reverse Transcriptase (20x), 1 x 100 µl of BlitzAmp RT Buffer (4x)	1203101
BlitzAmp cDNA Synthesis System (60)	For 60 x 20 µl cDNA reactions, 3 x 20 µl of BlitzAmp Reverse Transcriptase (20x), 3 x 100 µl of BlitzAmp RT Buffer (4x)	1203103
BlitzAmp cDNA Synthesis System (200)	For 200 x 20 µl cDNA reactions, 10 x 20 µl of BlitzAmp Reverse Transcriptase (20x), 10 x 100 µl of BlitzAmp RT Buffer (4x)	1203104

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Literature 1204991C

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