



Supreme NZY RT SuperMix 5x

1 minute cDNA Synthesis
Fast. Reliable. Efficient.

Achieve full-length cDNA synthesis in just **1 minute** with our 5x master mix. Benefit from high-fidelity performance from low RNA inputs across a broad 30–70 °C range (optimal at 60 °C).



Supreme NZY RT SuperMix 5x

Achieve ultra-fast, high-yield cDNA synthesis in just 1 minute with optimized efficiency and reliability.

Get full-length cDNA synthesis from minimal RNA inputs with ready-to-use 5x master mix. Ensure ultra-fast cDNA synthesis with the Supreme NZY RT SuperMix 5x, engineered for high yields of full-length cDNA in just **1 minute**. This advanced formulation is optimized for high-throughput workflows, ensuring maximum efficiency without compromising performance. Designed for flexibility, the Supreme NZY RT SuperMix 5x supports a **broad temperature range (30–70 °C)** while ensuring consistent, high-quality cDNA synthesis, even from **low RNA inputs**.



Fast cDNA Synthesis

First-strand cDNA synthesis in just 1 minute, reducing reaction time without compromising yield or quality.



High Yield & Sensitivity

Generates full-length cDNA, even from low RNA input, ensuring accuracy for RT-qPCR, gene expression and RNA quantification.



Streamlined Workflow

Ready-to-use 5x master mix, minimizing pipetting steps and reducing variability.



Efficient at Broad Range of Temperature (30 °C to 70 °C)

High temperature (up to 70 °C) facilitate the melting of RNA secondary structures for efficient transcription. Low temperature (as low as 30 °C) to help preserve RNA integrity by reducing degradation.



Inhibitor Resistance

Highly resistant to inhibitors, ensuring reliable performance even with challenging samples.

Versatile

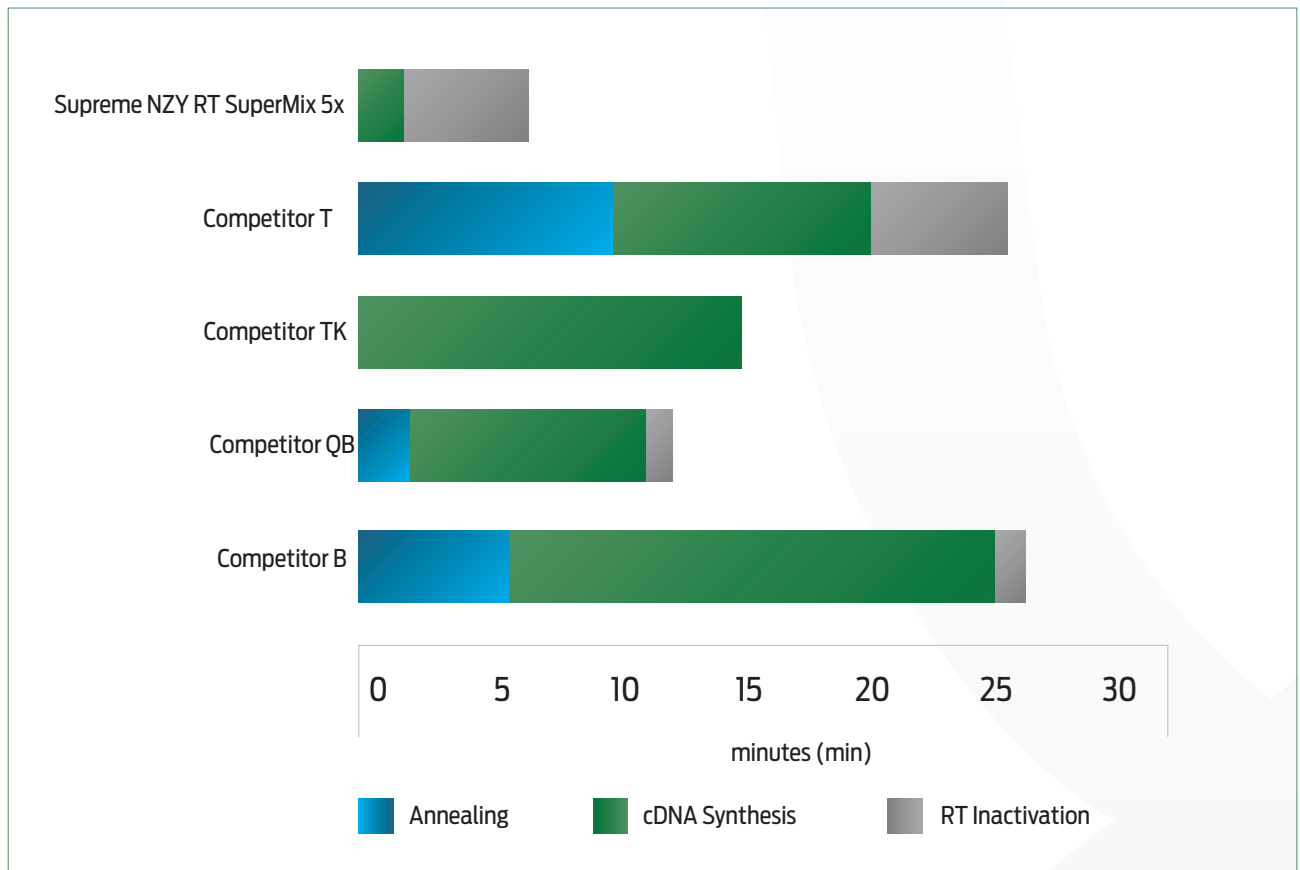
Robust template for for downstream applications including qPCR, RNA quantification and gene expression analysis.



Protocol Time

Optimized for speed: 0 second annealing, 1 minute cDNA synthesis, 5 minute RT inactivation.

With zero annealing time, ultra-fast cDNA synthesis in just **1 minute**, and complete RT inactivation in 5 minutes, Supreme NZY RT SuperMix 5x outperforms competitors at every step. Supreme NZY RT SuperMix 5x eliminates long annealing steps and slow cDNA synthesis required by competitors, delivering results up to 10 times faster. Unlike other mixes that leave residual RT activity, it ensures complete inactivation for accurate and reliable RT-qPCR workflows.



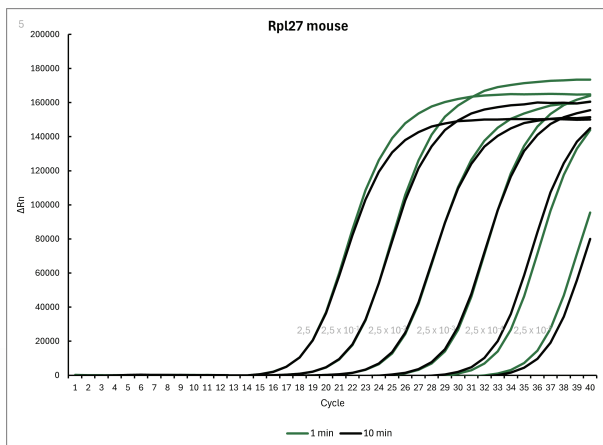
Sensitivity and Speed

Consistently high reaction efficiency maintained from 1-minute to 10-minute incubations.

Supreme NZY RT SuperMix 5x maintains high reaction efficiency over time, with minimal variation between **1-minute** and **10-minute** reactions. This ensures reliable amplification performance without compromising speed or accuracy.

Efficiency (%)	1 min	10 min
Rpl27 mouse	95,105	93,938
PPIA mouse	93,496	91,212

Rpl27 mouse



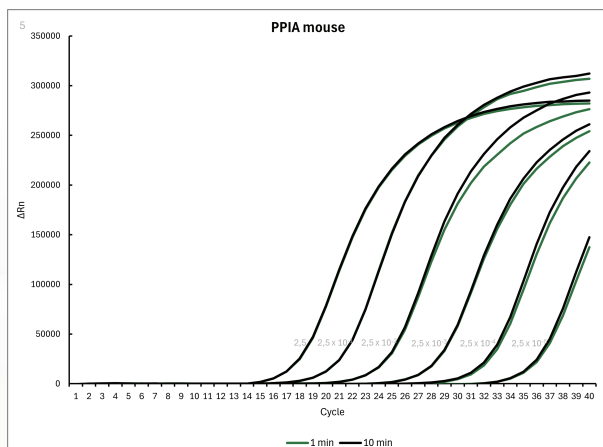
Rpl27 Mouse cDNA Synthesis: 1-Minute vs. 10-Minute Reaction Comparison

Green Curve (1 min reaction): Supreme NZY RT SuperMix 5x enables ultra-fast cDNA synthesis in just 1 minute, achieving Ct values comparable to the 10-minute reaction. It significantly reduces workflow time while maintaining high yield and sensitivity.

Black Curve (10 min reaction): Standard 10-minute cDNA synthesis reaction, showing no significant advantage over the faster 1-minute protocol.

This demonstrates that Supreme NZY RT SuperMix 5x delivers the same efficiency in a fraction of the time, ensuring rapid and reliable RT-qPCR results without compromising performance.

PPIA mouse



PPIA Mouse cDNA Synthesis: 1-Minute vs. 10-Minute Reaction Comparison

Green Curve (1 min reaction): Supreme NZY RT SuperMix 5x offers ultra-fast cDNA synthesis in just 1 minute, delivering Ct values comparable to those achieved with a 10-minute reaction. This significantly shortens workflow time while ensuring high yield and sensitivity.

Black Curve (10 min reaction): Standard 10-minute cDNA synthesis reaction, showing minimal improvement over the faster 1-minute protocol.

This data underscores the efficiency of Supreme NZY RT SuperMix 5x, proving that you can achieve high-quality results in a fraction of the time, offering faster throughput and reliable performance.

Temperature Range

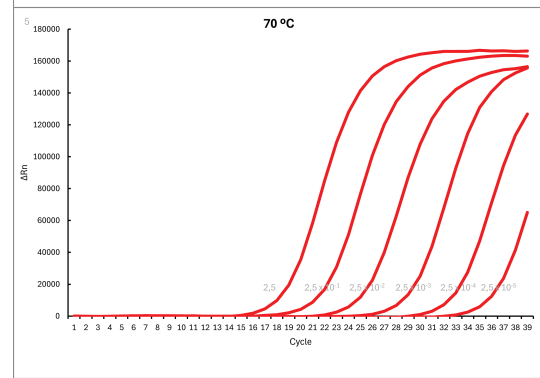
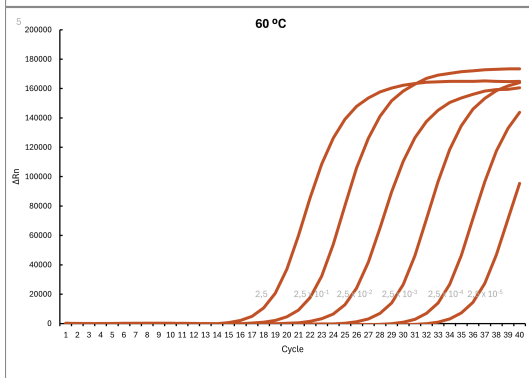
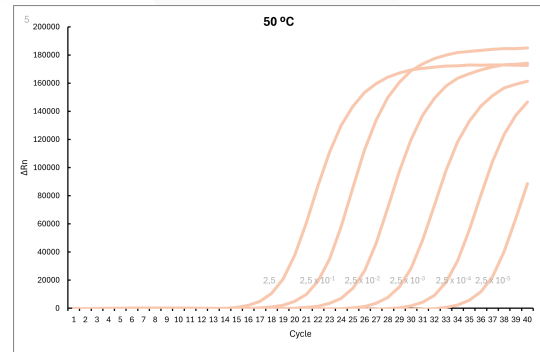
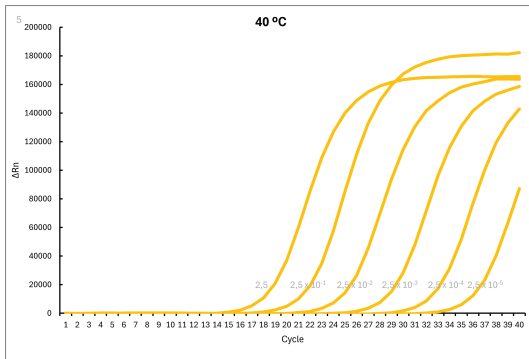
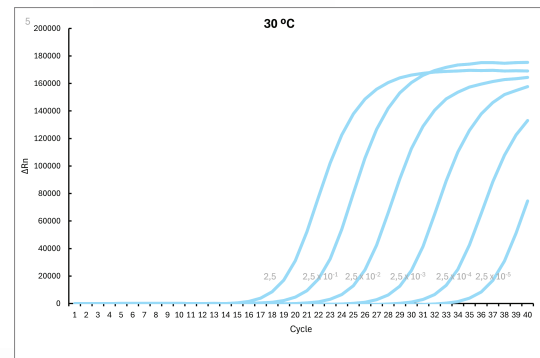
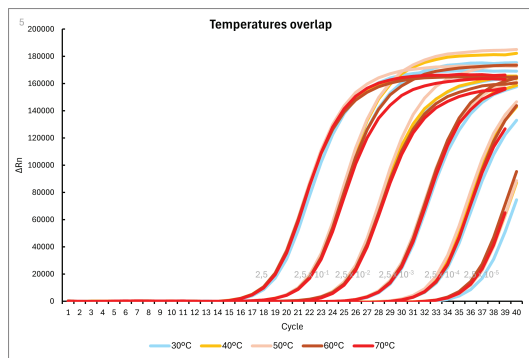
Robust cDNA synthesis with minimal Ct variation across a broad temperature range

Supreme NZY RT SuperMix 5x ensures reliable and stable cDNA synthesis across a wide temperature range. With minimal Ct variation from 30 °C to 70 °C, it delivers consistent results, providing flexibility for diverse experimental conditions.

Average Ct cDNA Temperature - 10ng/μL

30 °C	40 °C	50 °C	60 °C	70 °C
26,680	26,397	26,398	26,480	26,569

ΔRn cDNA for 1 min- Rpl27 mouse



Supreme NZY RT SuperMix 5x



Optimized for high-speed and efficient cDNA synthesis at high temperatures, provided in 5x concentrated mix, simplifying experimental workflows.

[Click to Request Sample](#)

 **Storage Conditions:** -85 °C to -15 °C

Unit Size:

200 μ L (50 rxns of 20 μ L) • MB49901

5 x 200 μ L (250 rxns of 20 μ L) • MB49902

NZYSupreme qPCR Green Master Mix (2x)



NZYSupreme qPCR Green Master Mix is a high-performing and easy-to-use mixture for real-time PCR. It features a hot-start enzyme control mechanism and it is optimized for DNA-intercalating dye detection on various instruments.

[Click to Request Sample](#)

 **Storage Conditions:** -85 °C to -15 °C

Unit Size:

2 mL (200 x 20 μ L) • MB41901

5 mL (500 x 20 μ L) • MB41902

20 mL (2000 x 20 μ L) • MB41903

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