

## RScript Hot 5X RT MasterMix

Cat. No. G590EU

Store at -20°C.

## **Product Description**

RScript Hot 5X RT MasterMix is a convenient, ready-to-use formulation designed for efficient first-strand cDNA synthesis. This product simplifies the cDNA synthesis process, ensuring reliability and reproducibility. The optimized 5X RT MasterMix contains abm's proprietary RScript Hot Reverse Transcriptase, RNaseOFF Ribonuclease Inhibitor, dNTPs, and a carefully balanced ratio of Oligo(dT)s and Random Primers. The resulting high-quality cDNA is suitable for a wide range of downstream applications.

Product Component	Quantity	Part No.
RScript Hot 5X RT MasterMix	100 rxn (400 µl)	P590-1EU
Nuclease-Free H <sub>2</sub> O	1.0 ml	P100

## Protocol

1. Thoroughly thaw and mix individual components before use, and assemble reaction on ice.

Component	Volume	
RScript Hot 5X RT MasterMix	4 µl	
Total RNA or poly(A) + mRNA	Variable (1 ng - 2 µg/rxn)	
Nuclease-free H <sub>2</sub> O	up to 20 µl	

- 2. Gently mix the reaction and briefly centrifuge.
- 3. Incubate the mixture at 60°C for 10 minutes.
- 4. Optional: Stop the reaction by heating at 95°C for 3 minutes. Chill on ice. The newly synthesized first-strand cDNA is ready for immediate downstream applications, or for long-term storage at -20°C.

## **General Notes**

- Both poly(A) + mRNA and total RNA can be used for first-strand cDNA synthesis, but poly(A) + mRNA may give higher yields and improved purity of final products.
- For longer transcripts, incubate the mixture at 60°C for up to 30 minutes.
- If input RNA samples are expected to have high levels of genomic DNA contamination, we recommend using abm's All-In-One 5X RT MasterMix with aDNA Removal (Cat. No. G592).