

High-Performance Reverse Transcriptase Premix

The core component of these products is the high-performance M-MLV GIII Reverse Transcriptase, which has independent intellectual property rights. It exhibits excellent advantages in terms of thermal stability, continuous synthesis capability, cDNA yield, and inhibitor tolerance. The All-in-One First-Strand Synthesis MasterMix (with dsDNase) is an efficient, convenient, and contamination-reducing first-strand cDNA synthesis kit. The premix contains all reverse transcription reaction components except for the RNA template. It is easy to use and suitable for fluorescence quantitative PCR analysis of the generated cDNA products. On the other hand, the RTase III Primer Flexible All-in-One Mix provides primers separately from other components, allowing customers to flexibly use different types of primers according to their experimental designs, and is more suitable for full-length cDNA cloning.



Advantages

•High Reaction Temperature

The reverse transcription can be performed at a temperature of up to 55°C, which effectively denatures the RNA secondary structure and ensures a more complete representation of the genes.

•Effective Genomic DNA Elimination

By utilizing dsDNase, a specific enzyme that digests double-stranded DNA, it effectively removes gDNA contamination without interfering with subsequent reactions. The inactivation process is straightforward and does not impact the downstream reactions.

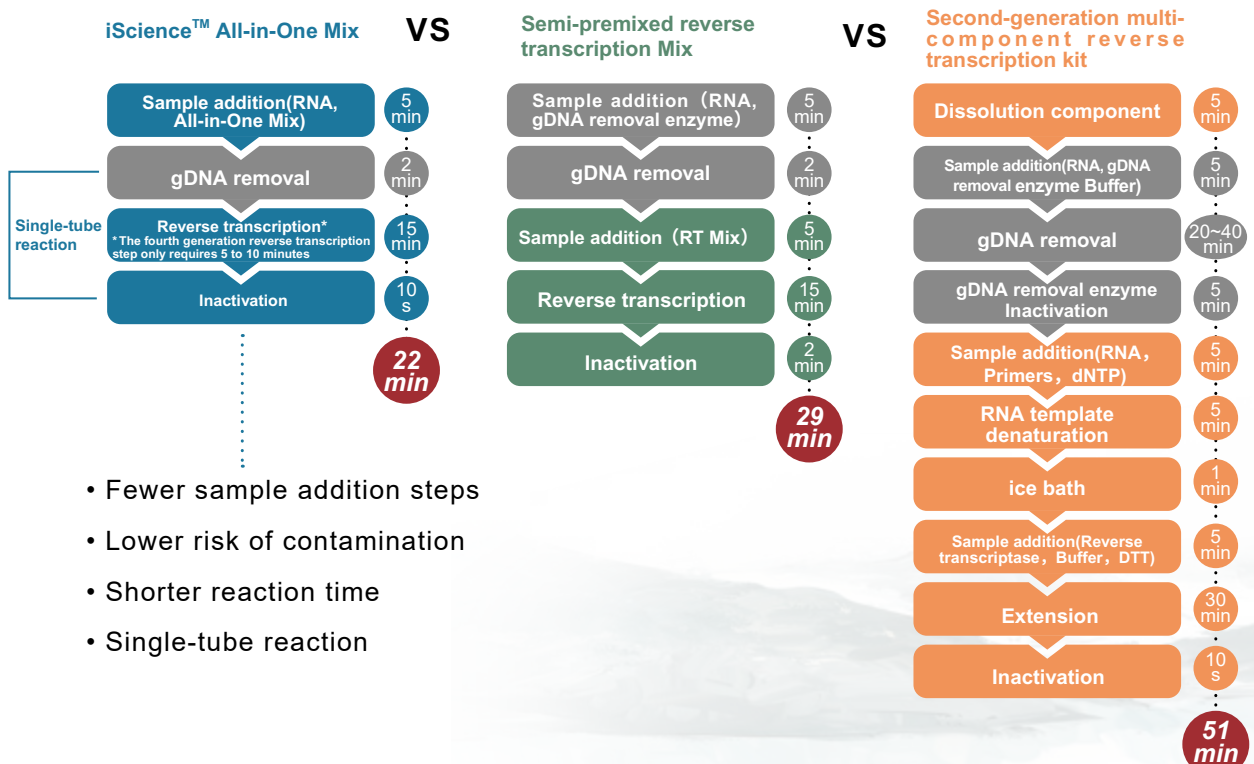
•Strong Inhibitor Tolerance

It has stronger tolerance against common contaminants such as Trizol and SDS in RNA extraction.

•All-in-One Premix

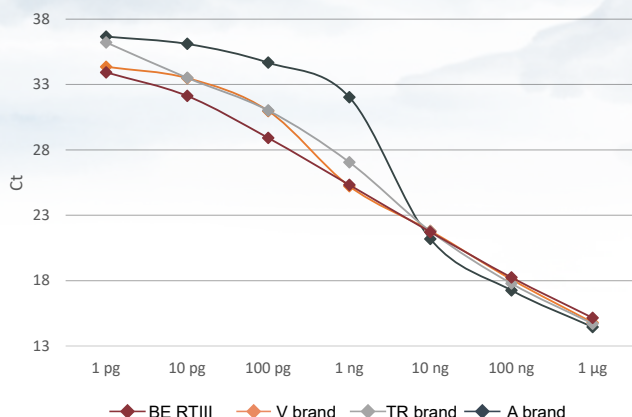
The All-in-One Mix is a one-tube pre-mixed solution that reduces reaction time, lowers the risk of contamination, and enables cDNA synthesis up to 12 kb in length.

simultaneous gDNA removal and reverse transcription in a single tube



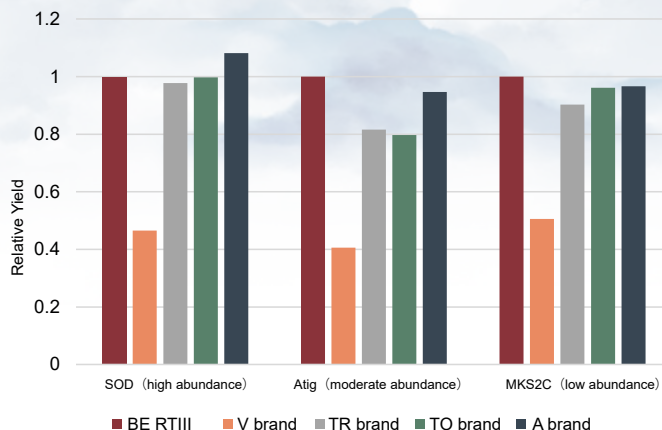
Performance Demonstration

Wide linear range of template concentration



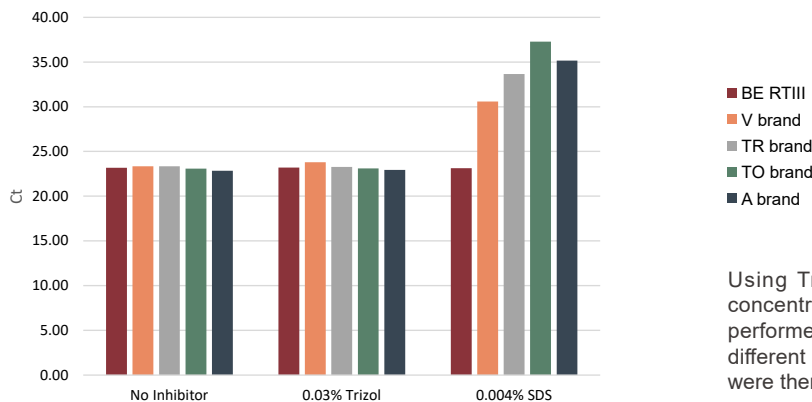
Using 1 pg to 1 µg of tomato RNA as templates, reverse transcription was performed according to the recommended reaction conditions of different brands of reverse transcription kits. The cDNA products were then quantified using qPCR.

Efficient reverse transcription of genes at different abundances



Using 1 µg of tomato RNA as a template, reverse transcription was performed according to the recommended reaction conditions of different brands of reverse transcription kits. Using cDNA products as templates, qPCR detection was performed on genes with different expression abundances.

Strong tolerance to reverse transcription inhibitors



Using Trizol at a final concentration of 0.3% and SDS at a concentration of 0.004% as inhibitors, reverse transcription was performed according to the recommended reaction conditions of different brands of reverse transcription kits. The cDNA products were then used for qPCR.

Ordering Information

REF No.	Name	Specs
EG15124S	M-MLV GIII Reverse Transcriptase	10000 U
EG15123S	M-MLV RNase H ⁻ Reverse Transcriptase	10000 U
EG21104S	High-Accuracy Reverse Transcriptase	10000 U
EG15133S	All-in-One First-Strand Synthesis MasterMix (with dsDNase)	100 rxns
EG20131S	All-in-One First-Strand Synthesis MasterMix	100 rxns
EG20133S	RTase III Primer Flexible All-in-One Mix	100 rxns
EG20002S	RNase Inhibitor, Murine	10000 U

BestEnzymes Biotech Co., Ltd

Add: No.17 Huaguoshan Avenue, Lianyungang City, Jiangsu Province, China
Tel: 0518-8558 6628 · support@best-enzymes.com · <http://en.best-enzymes.com>



ver.202603