RT-Supermix [with gDNA Eraser]

RT-Supermix [with gDNA Eraser] is a high-quality, efficient, and convenient one-step cDNA synthesis premix. It is designed to minimize contamination and contains all the necessary components for first-strand cDNA synthesis, including M-MLV GIII Reverse Transcriptase and its reaction buffer, RNase inhibitor, dNTPs, and random primers-all the necessary components. Additionally, it requires the addition of RNA templates, primers, and water to initiate the reaction. This kit can be used with different types of reverse transcription primers to meet diverse experimental needs. Depending on the experimental design, Oligo(dT)??VN, Random hexamers, or Gene Specific Primers can be selected. This reverse transcription premix allows for the generation of cDNA up to 12 kb in size within 15 minutes.

RNA extracted from cells often contains genomic DNA contamination. If the genomic DNA is not removed before reverse transcription, both the genomic DNA and cDNA will be amplified during downstream qPCR reactions (especially when the primers are designed on the same exon), thus affecting the accuracy of gene expression quantification. This kit utilizes dsDNase to efficiently remove genomic DNA contamination. dsDNase can specifically digest double-stranded DNA (dsDNA or the DNA strand in DNA-RNA hybrid chains) and is thermally sensitive, rapidly and irreversibly inactivated at the reverse transcription temperature. Compared to the traditional method of using DNase I to remove genomic DNA contamination, dsDNase does not require the addition of EDTA for inactivation, saving experimental time and reducing inhibition of the reverse transcription reaction.

Catalog No.	512010
Size	100 rxns
Product Category	PCR / qPCR / RT-PCR
Storage/Stability	-20°C/1 year
Shipping	Gel Packs