

Wonder RT cDNA Synthesis kit

Wonder RT kit is a rapid and very sensitive method for first strand cDNA synthesis:

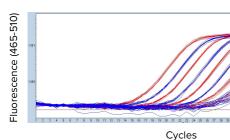
- an extremely efficient reverse transcriptase allows highly robust first strand synthesis and higher cDNA yields from a wide range of input RNA concentrations;
- o a 5x Reaction Buffer Mix provides highly optimized components for efficient reverse transcription.

Features

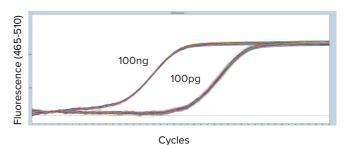
- Easy reaction set up: primers and dNTPs are included in the 5x Reaction Buffer Mix and RNase inhibitor is included in the Reverse Transcriptase Mix
- **Unbiased:** primers are composed of an optimized mixture of random hexamers and anchored oligo dT primers for complete 5' to 3' RNA sequence representation
- Fast: high-yield reverse transcription in as little as 25 minutes
- **Robust:** reliable reverse transcription even with complex templates or in the presence of inhibitors thanks to specific enhancers included in the 5x Reaction Buffer Mix
- **Sensitive**: down to 1 pg of input RNA and accurate detection of very low-copy targets

Applications

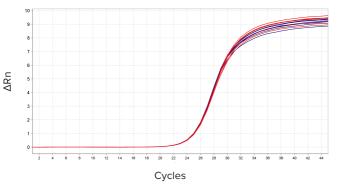
Gene expression analysis
Tissue biopsy analysis
miRNA profiling/quantification
RNA target detection
Pathogen detection



High efficiency and sensitivity. Wonder RT cDNA synthesis kit and the RT kit from competitor Q were used for reverse transcription of total RNA, following the recommended reaction conditions. A 10-fold serial dilution of the obtained cDNAs were then used in qPCR reactions, using SYBR. The results illustrate that Wonder RT (red) is both more efficient and more sensitive than competitor Q (blue), as shown by the earlier Ct values and by the better uniformity between curves of decreasing amounts of input RNA.



High reproducibility. Wonder RT cDNA synthesis kit was used in 48 replicates of the same reverse transcription reactions containing 100 ng or 100 pg of mouse brain total RNA. The obtained cDNAs were used in individual qPCR reactions. Wonder RT cDNA synthesis kit shows an excellent reverse transcription reproducibility, both with high and low levels of input RNA.



Unbiased representation of 5' and 3' regions of target genes. Reverse transcription of total RNA was performed with Wonder RT cDNA synthesis kit and the obtained cDNA was used in qPCR reactions. Two primer pairs were designed respectively at the 5' (red) and at the 3' (blue) ends of the Canx gene, 5 kb apart. The results illustrate that there were no significant Ct differences between the two primer pairs; this demonstrates unbiased representation of both 5' and 3' regions.

Ordering information

Cat. Num.	Description	Size*
EME037050	Wonder RT - cDNA Synthesis kit	50 rxns
EME037250	Wonder RT - cDNA Synthesis kit	5 x 50 rxns

*reaction volume 20 μl

Storage and Stability 2 years at -20°C Shipping Dry Ice

Sample Available!

