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**AccuPower® RT PreMix is a new, powerful, ready-to-use RT kit for the synthesis of cDNA with superiority to other RT products.**

## Advantages

### Speed

Substantial reduction in reaction setup time.

### Stability

As each tube of *AccuPower®* RT PreMix contains a stabilizer (patented in US and Korea), which can maintain the stability of the RTase up to 2 years at -20°C.

### Reproducibility and Yield

The strict functional QC assays demonstrated highly consistent and reproducible RT performance. In most applications an increase in yield is observed as compared to the standard reactions.

### Simplicity

The fewer manual steps allow reduction in potential errors. Each tube contains tracking dye (**exclude K -2041**) and precipitant for agarose gel electrophoresis, eliminating the needs for a separate loading buffer

## Experimental Protocol

- Mix the template RNA and primer in a sterile tube as indicated below;

Concentration of template RNA and primer			
Reaction volume		20 µl reaction	50 µl reaction
Template RNA	Total RNA	0.5~1.0 µg	1.0~2.0 µg
	Poly(A) RNA	0.05~0.1 µg	0.1~0.2 µg
Primer	Oligo dT <sub>18</sub>	0.5 µg(100 pmole)	1.0 µg(200 pmole)
	Sequence specific	10~30 pmole	20~50 pmole

- Incubate the mixture at 70°C for 5 min and place it on ice.
- Transfer the incubated mixture to an *AccuPower®* RT PreMix tube, and then fill up the reaction volume with DEPC – DW.
- Dissolve the vacuum dried blue pellet by vortexing, and briefly spin down.
- Add mineral oil to each tube (This step is unnecessary when using a thermal cycler with top heating).
- Perform cDNA synthesis reaction as follows :

42°C, 60 min. (cDNA synthesis)

94°C, 5 min. (RTase inactivation)

☞ If PCR is needed following RT reaction, perform the PCR using *AccuPower®* PCR PreMix as follows :

- Transfer 2~5 µl of the RT product (synthesized cDNA) to *AccuPower®* PCR PreMix tube.
- Perform PCR cycles according to the PCR condition.

(Annealing temperature and time need to be optimized for each primer/template combination.)

## Ordering Information

Tube type	Reaction	Cat.No	Description	Tube type	Reaction	Cat.No	Description
0.2 ml Tube	20 µl	K-2041	0.2 ml thin-wall 8-strip tubes with attached cap / 96 tubes	96-well	20 µl	K-2261-4	thin-wall 96-well flat plate
		K-2041-B	0.2 ml thin-wall 8-strip tubes with attached cap/480 tubes			K-2261-5	thin-wall 96-well full-skirted plate
	K-2043	0.2 ml thin-wall 8-strip tubes with attached cap / 96 tubes	K-2261-6			thin-wall 96-well semi-skirted plate	
	50 µl	K-2043-B	0.2 ml thin-wall 8-strip tubes with attached cap/480 tubes	384-well	5 µl	K-2082-1	thin-wall 384-well full-skirted plate
K-2261-1		thin-wall 96-well flat plate	10 µl			K-2082-2	thin-wall 384-well full-skirted plate
96-well	10 µl	K-2261-2	thin-wall 96-well full-skirted plate			20 µl	K-2082-3
		K-2261-3	thin-wall 96-well semi-skirted plate	0.5ml Tube	50 µl	K-2042	0.5 ml thin-wall tubes with attached cap / 100 tubes

## Notice

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**A complete product list appears on our web site at [www.bioneer.com](http://www.bioneer.com)**