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**Order**

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**AccuPower<sup>®</sup> 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<sup>®</sup> 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>	0.5µg(100pmole)	1.0µg(200pmole)
	Sequence specific	10~30 pmole	20~50 pmole

- Incubate the mixture at 70°C for 5min and place it on ice.
- Transfer the incubated mixture to an AccuPower<sup>®</sup> RT PreMix tube, and then fill up the reaction volume with DEPC – DW.
- Dissolve the lyophilized 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<sup>®</sup> PCR PreMix as follows :

- i) Transfer 2~5 µl of the RT product (synthesized cDNA) to AccuPower<sup>®</sup> PCR PreMix tube.
- ii) Perform PCR cycles according to the PCR condition.  
(Annealing temperature and time need to be optimized for each primer/template combination.)

**Trademark**

AccuPower is a trademark of Bioneer Corporation.

**Ordering Information**

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

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