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**AccuPower® RT-PCR PreMix contains all the components necessary for cDNA synthesis and amplification in one tube.**

### Advantages

**Speed** Substantial reduction in reaction setup time.

**Stability** As each tube of AccuPower® RT-PCR PreMix contains a stabilizer (patented in US and Korea), which can maintain the stability of the RTase and DNA polymerase up to 2 years at -20°C. Pre-denaturation during PCR has no effects on the activity of the DNA polymerase.

### Reproducibility and Yield

The strict functional QC assays demonstrated highly consistent and reproducible RT/PCR 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 and precipitant for agarose gel electrophoresis, eliminating the needs for a separate loading buffer.

### Experimental Protocol

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

#### Concentration of template RNA and primer

		Reaction volume	20 µl reaction	50 µl reaction
Templat e 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	Primer	10~30 pmole	20~50 pmole	

- Incubate the mixture at 70°C for 5min and place it on ice.
- Transfer the incubated mixture and the forward primer to AccuPower® RT-PCR PreMix tube, 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)
- 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-2055	0.2 ml thin-wall 8-strip tubes with attached cap / 96 tubes	96-well	20 ul	K-2262-4	thin-wall 96-well flat plate
		K-2055-B	0.2 ml thin-wall 8-strip tubes with attached cap / 480 tubes			K-2262-5	thin-wall 96-well full-skirted plate
	50 ul	K-2057	0.2 ml thin-wall 8-strip tubes with attached cap / 96 tubes		5 ul	K-2262-6	thin-wall 96-well semi-skirted plate
		K-2057-B	0.2 ml thin-wall 8-strip tubes with attached cap / 480 tubes	384-well	10 ul	K-2084-1	thin-wall 384-well full-skirted plate
96-well	10 ul	K-2262-1	thin-wall 96-well flat plate		20 ul	K-2084-2	thin-wall 384-well full-skirted plate
		K-2262-2	thin-wall 96-well full-skirted plate		0.5ml Tube	K-2056	0.5 ml thin-wall tubes with attached cap / 100 tubes
		K-2262-3	thin-wall 96-well semi-skirted plate		50ul		

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