



RocketScript™ Reverse Transcriptase (*NEW*)

Description

The *AccuPower*^{cs} 2X Greenstar qPCR Master Mix is a ready-to-use cocktail containing all components, except primer, for the amplification and detection of DNA in real-time quantitative PCR (qPCR). It combines the automatic Hotstart technology of Top DNA polymerase and SYBR Green I fluorescent dye to deliver excellent sensitivity in the quantification of target sequences, with a linear dose response over a wide range of target concentration. Volumes are provided for 100 or 200 amplification reactions of 50ul each.

Features and Benefits

- High Specificity : *AccuPower*^{cs} 2X Greenstar qPCR Master Mix provides more accurate Real-time PCR result by application of Hot-start method.
- Stability: While engineering the enzyme, the researchers at Bioneer have gone ahead and engineered robust performance into *RocketScript*TM
- Simplicity: Ready to use, *AccuPower*^{cs} 2X Greenstar qPCR Master Mix contains everything of Real-time PCR excluding primer and template.
- Reproducibility: Bioneer's strict quality controlled production system ensures that your results will be reproducible experiment after experiment

Applications

- Real-time quantification of DNA and cDNA targets - Gene expression profiling - Microbial & Viral pathogen detection

Experimental Data

Fig 1. Highly reproducible Ct values

Amplification of a 90-bp target gene was detected using serially diluted LP(Legionella Pneumoniae) genomic DNA (from 10^6 copies to 10^1 copies) with AccuPower^{cf} 2X Greenstar qPCR Master mix. As shown in Fig. Highly reproducible Ct values were achieved within each Lot. set of triplicates

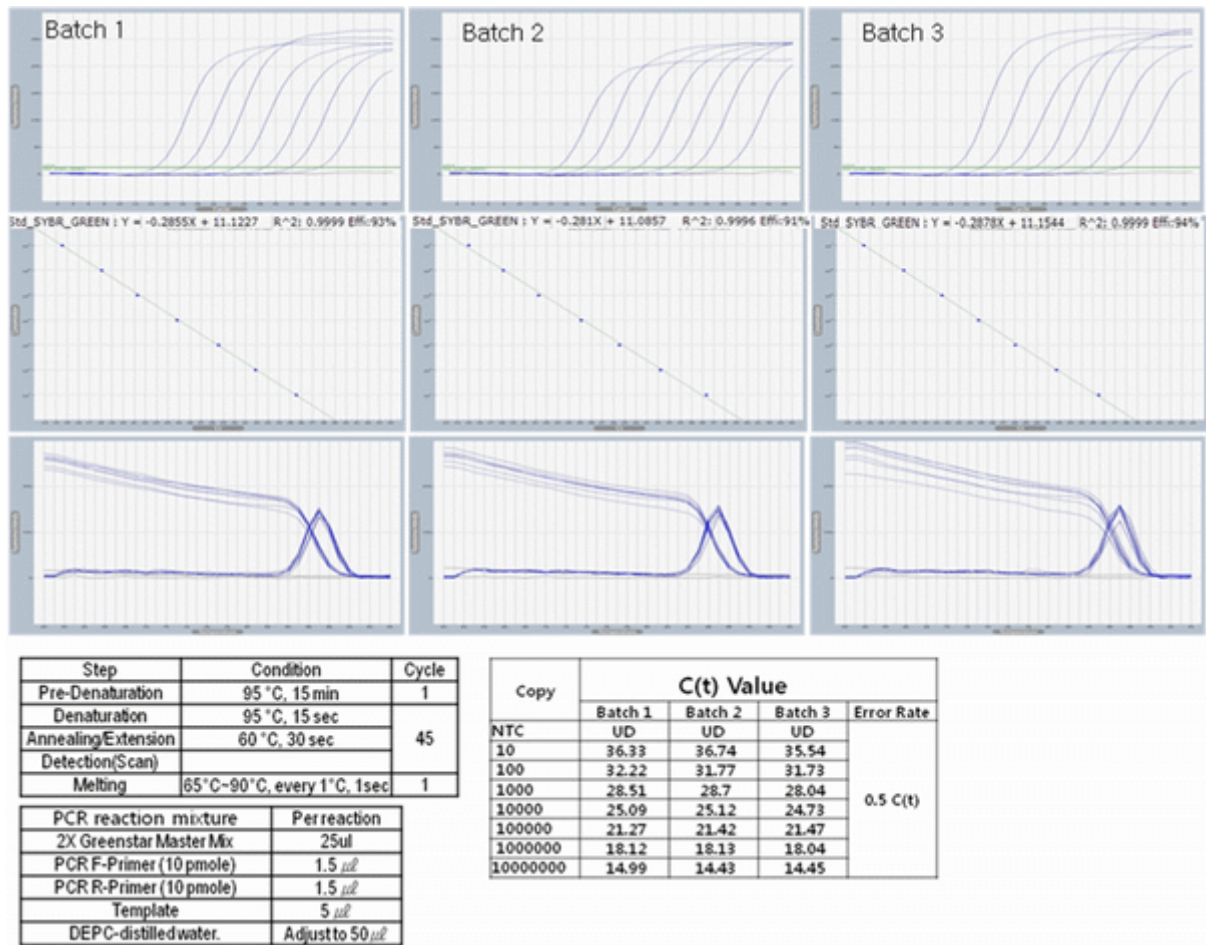


Fig 2. Comparison of the Specificity of the SYBR^{cf} Green assay

Amplification of a 90-bp target gene was detected using serially diluted LP(Legionella Pneumoniae) genomic DNA (10n dilution; 105~101copies) with AccuPower 2X Greenstar qPCR Master mix. As shown in Fig. Very small amount of primer dimers was appeared in AccuPower 2X Greenstar qPCR Master mix than other kits.

cf Using a Bioneer ExicyclerTM 96

- The annealing temperature can be set to 55~65jÆC, depending on the primer Tm value.
- The annealing time should be set for 5~20 seconds. Longer annealing time results in increased efficiency, and a shorter time decreases non-specific amplification.

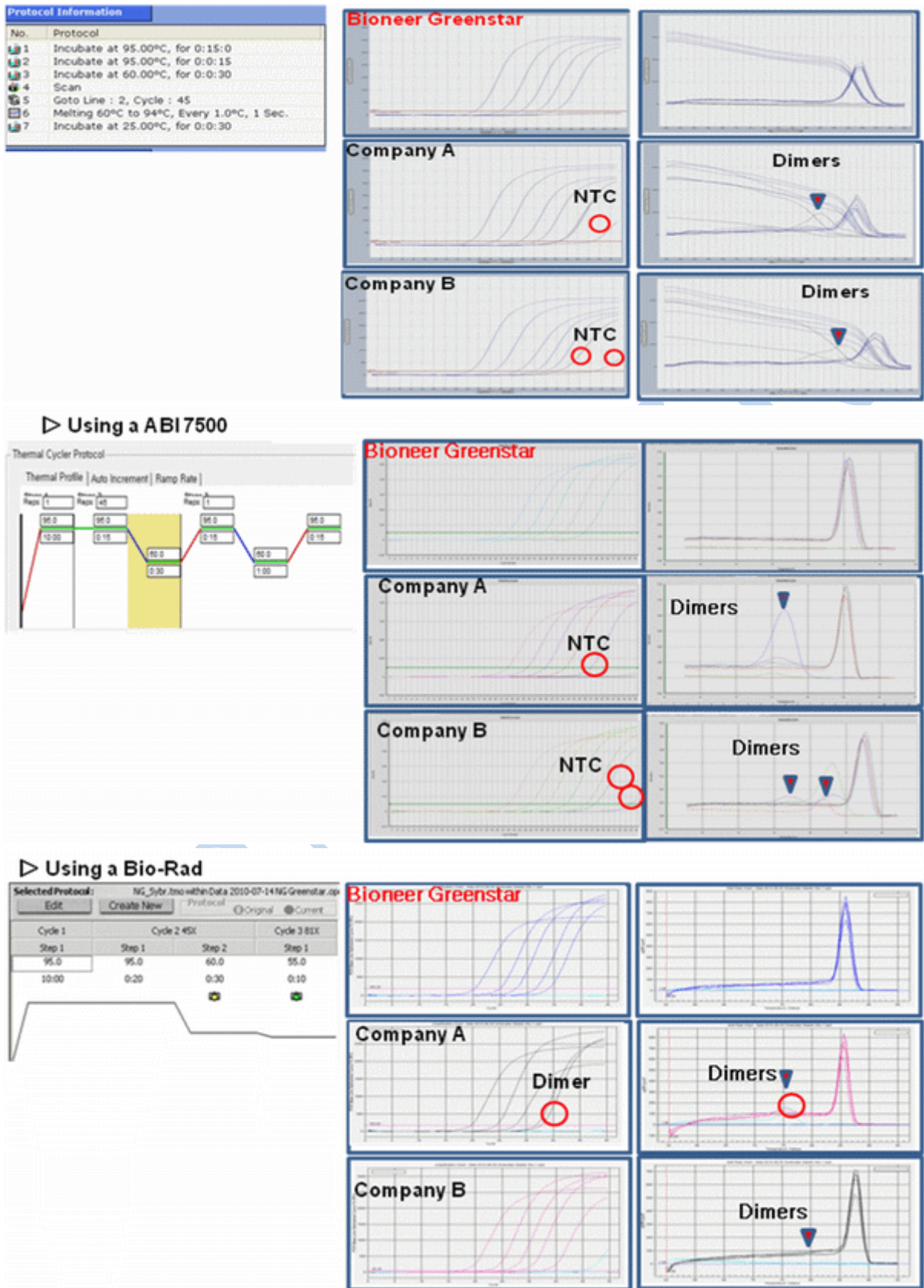


Fig3. Gene Expression Analysis

*AccuTarget*TM Validated Real-Time PCR Primer Library for Human is designed by *Bioneerj* s

bioinformatics tool and targeting for human genome. cDNA was synthesized using Human PTGS2 target primer of those and Human total RNA identically quantified from Hela cell and blood cell with AccuPower CycleScript RT PreMix(K-2044, Bioneer). Gene analysis was carried out both Hela cell and blood cell by operating Real-time PCR reaction(95jÆC 10 min, 1 cycle and 95jÆC 10 sec, 58jÆC 25 sec, 72jÆC 30 sec, 41 cycles) using the cDNA, *AccuPower*^{cc} 2X GreenStar qPCR Master Mix and *Exicycler*TM 96 Real-Time Thermal Block(Cat. No. A-2060).

