AccuPower® 2X *GreenStar*™ qPCR Master Mix

● **Introduction:**

AccuPower® 2X *GreenStar*™ *qPCR Master mix* is a ready-to-use reagent containing all components for real-time PCR reaction, except for target-specific primers.

This product can be used in real-time PCR experiments for the amplification and detection of genomic DNA and cDNA targets, differential gene expression profiling, and Microbial & Viral pathogen detection. This product provides the reproducible results with the superior specificity, high sensitivity, wide dynamic range and accurate quantification.

● **Features:** The *AccuPower* 2X *GreenStar* qPCR Master Mix is a single-tube lyophilized Master Mix including SYBR Green I dye, Hotstart *Top* DNA polymerase,

The *AccuPower* 2X *GreenStar* qPCR Master Mix provides significant reduction of nonspecific reaction, high sensitivity, extended stability and great universality. Just additions of primers of your interesting target gene into *AccuPower* 2X *GreenStar* qPCR Master mix provide always reproducible results with convenience of use.

● **Protocol:**

Recommended Protocol Using *ExiCycler*™ version 3.0 (Bioneer Co.) and IQ5 (Bio-Rad Inc.), ABI7500(ABI)

1. Add following PCR Tube into 2X *GreenStar* qPCR Master mix
2. Seal the Optical adhesive film for real-time PCR on tube or plate
3. Completely mix by vigorous vortexing for resuspension of Master Mix.
4. Centrifuge at 3,000 rpm, for 2 min
5. Start Real-time PCR instrument and load it
6. Program the PCR setting
7. After reaction is completed, perform data analysis.

● **Result:** Highly reproducible Ct values

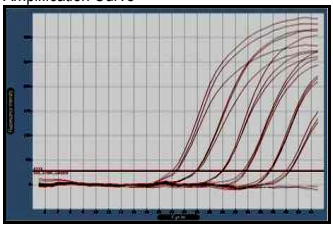
Amplification of an 85-bp target gene was detected using serially diluted West Nile virus (from 10^6 copies to 10^1 copies) with *AccuPower* 2X *GreenStar* qPCR Master mix.

As shown in Fig. Highly reproducible Ct values were achieved within each Lot. set of triplicates.

Components.	50 µl Rxn
2X *GreenStar* Master Mix	25 µl
PCR F-Primer (10 pmole)	1-2 µl
PCR R-Primer (10 pmole)	1-2 µl
50X ROX dye	1 µl
Template	5-10 µl
DEPC-distilled water.	Adjust to 50 µl

Step	Condition	Cycle
Pre-Denaturation	95 °C, 10-15 min	1
Denaturation	95 °C, 5-20 sec	40-45
Annealing/Extension	55-60 °C, 30-45 sec	
Detection	Scan	
Melting	—	1

Amplification Curve



	C(t) Value			
Copy	Batch 1	Batch 2	Batch 3	Error Range 0.08 C(t)
NTC	UD	UD	UD	
10	40.01	40.42	40.57	
100	37.38	37.28	37.56	
1000	33.22	33.53	33.72	
10000	29.94	29.87	30.01	
100000	25.74	25.77	26.05	
1000000	22.47	22.05	22.72	