BIONEER
Innovation • Value • Discovery

AccuPower® 2X Greenstar™ qPCR Master Mix

Bioneer Corporation
8-11, Munpyeongseo-ro
Daedeok-gu, Daejeon 306-220
Republic of Korea
Tel: (Korea)1588 - 9788
(International) + 82 - 42 - 930 - 8777
Fax: + 82 - 42 - 930 - 8600
E-mail: sales@bioneer.com

Bioneer, Inc.
1000 Atlantic Avenue
Alameda, CA 94501 USA
Toll free: + 1 - 877 - 264 - 4300
Fax: + 1 - 510 - 865 - 0350
E-mail: order.usa@bioneer.us.com

Bioneer Trade(Shanghai) Co., Ltd
403 Room, Building 88, no.887
Zuchongzhi Road, Zhangjiang High Tech Park
PuDong New District, Shanghai 201203 China
Tel: + 86 - 21 - 5080 - 0969
Fax: + 86 - 21 - 5080 - 1620
E-mail: salescn@bioneer.com

Bioneer Pangyo R&D Center
Pangyo R&D Center
B-702, Korea Bio Park Bldg., 700,
Daewangpangyo-ro, Bundang-gu,
Seongnam-si, Gyeonggi-do, 463-400,
Republic of Korea
Tel: + 82 - 31 - 628 - 0500
Fax: + 82 - 31 - 628 - 0555

Order
Domestic only: 1588-9788
E-mail: order@bioneer.co.kr
URL: www.bioneer.com

● Introduction :

AccuPower® 2X GreenStar qPCR Master mix is a ready-to-use reagent containing all components for real-time PCR reactions with the exception of target-specific primers.

The product can be used in real-time PCR experiments for the amplification and detection of genomic DNA and cDNA targets, differential gene expression profiling as well as microbial & viral pathogen detection. It provides reproducible results with superior specificity and sensitivity and works through a wide dynamic range with accurate quantification.

● Features:

AccuPower® 2X GreenStar qPCR Master mix is a Master mix that includes SYBR Green I dye & Hotstart Top DNA polymerase.

The product design provides for significant reduction of nonspecific reactions, high sensitivity, extended stability and is suitable for universal applications. Just add primers specific to your target gene into the Master mix for reproducible results with convenience of use.

● Protocol :

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

1. Add following PCR Tube into 2X GreenStar qPCR Master mix.
2. Seal 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.
6. Program the PCR setting.
7. After reaction is completed, perform data analysis.

● Results : Highly reproducible Ct values

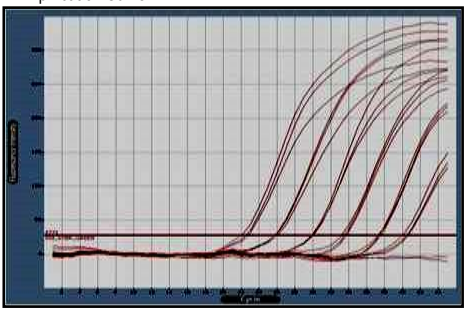
e.g. Amplification of an 85-bp target gene was detected using serially diluted West Nile virus (from 10^6 copies to 10^1 copies) with AccuPower® Greenstar qPCR Master mix.

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

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

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	Lot 1	Lot 2	Lot 3	
NTC	UD	UD	UD	
10	40.01	40.42	40.57	
100	37.38	37.28	37.56	Error Range 0.08 C(t)
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	