



## The latest reagent technology ensures Ultra-Fast reactions!

### Another innovation through the latest PCR reagent technology

Adding to the innovative hardware technology for PCR instrumentation, reliable reagent technology is another key component to perform ultra-fast amplification and detection of genes in PCR applications. Genesystem offers a series of PCR master mixes for ultra-fast PCR tasks using GENECHECKER™.

Depending on the application, three different formats are available for immediate and easy use for your PCR applications.

Optimized for ultra-fast reactions with GENECHECKER™

High sensitivity, efficiency, reproducibility and minimized PCR inhibition

Uses novel antibody-mediated hot-start DNA polymerases

Available for general PCR, real-time analysis and one-step RT-PCR

Product

Application

**Rapi:Amp**

**General Thermal Cycling**

**Rapi:Detect**

**Real Time PCR**

**Rapi:1-Step**

**One-Step RT PCR**

## Developments to give more value to your PCR application

The Series of master mixes for Genesystem are a 2x concentrated, ready-to-use reaction cocktail containing all components, except primers and template, for ultra-fast PCR tasks. These premixes includes a novel antibody-mediated hot-start DNA polymerases with improved speed when compared to other commercial polymerases. The master mix for real-time detection includes a double strand DNA specific-binding fluorescent dye and also there is areverse transcriptase available for one-step RT-PCR applications.

In addition, the Uracil-DNA glycosylase with dUTP system is applied to these PCR premixes for the prevention of carryover contamination. All the master mixes of Genesystem have been optimized to deliver maximum PCR efficiency, sensitivity and robust fluorescent signal using fast cycling protocols for dye-based detection in ultra-fast real-time PCR using **GENECHECKER™**.



### General Protocol

| Components                      | Volume               |
|---------------------------------|----------------------|
| DNA Template                    | Your Volume          |
| 2x Master Mix                   | 5µl                  |
| Forward Primer (5-10 pmoles/µl) | 1µl                  |
| Reverse Primer (5-10 pmoles/µl) | 1µl                  |
| D.W.                            | Adjust to Final 10µl |

### THERMAL CYCLING AND REAL-TIME PCR

| Step              | Condition           | Cycle(s)              |
|-------------------|---------------------|-----------------------|
| cDNA Synthesis    | Set at 0 sec        | 0                     |
| Enzyme Activation | 95°C for 30 secs    | 1                     |
| PCR Amplification | <b>Denaturation</b> | 95°C for 3-10 secs    |
|                   | <b>Annealing</b>    | (your temp) 3-10 secs |
|                   | <b>Extension</b>    | 72°C for 3-10 secs    |

### ONE STEP RT-PCR

| Condition          | Cycle(s) |
|--------------------|----------|
| 50°C for 5-30 mins | 1        |
| 95°C for 30 secs   | 1        |
| 95°C for 3-10 secs | 30-50    |
| 3-10 secs          | 30-50    |
| 72°C for 3-10 secs | 30-50    |

### ORDERING INFORMATION

| Cat. No. | Description   | Pack Size     |
|----------|---|---------------|
| 004001   | Rapi:Detect Master Mix with Fluorescent Dye for Model UF-150 GENECHECKER™ (400 Reactions)         | 1mL x 2 Tubes |
| 004002   | Rapi:1-Step Onestep RT-PCR Kit with Fluorescent Dye for Model UF-150 GENECHECKER™ (400 Reactions) | 1mL x 2 Tubes |
| 004003   | Rapi:Amp Master Mix for Model UF-100 GENECHECKER™ (400 Reactions)                                 | 1mL x 2 Tubes |

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