

## Two Unique Kits for All Your RT-PCR Needs!

### High Fidelity RT-PCR with Unparalleled Ease of Use New MasterAmp™ High Fidelity RT-PCR Kit

**IDEAL FOR ACCURATE CLONING OR EXPRESSION.** The new MasterAmp™ High Fidelity RT-PCR Kit is ideal when you want to clone and/or express an accurate RT-PCR product and therefore need minimal PCR error rates.

**EXCELLENT FIDELITY AND RELIABILITY.** The new MasterAmp High Fidelity RT-PCR Kit uses MMLV-RT Plus, an enzyme unsurpassed in reliability for full-length cDNA synthesis. It also includes MasterAmp TAQurate™ DNA Polymerase, an enzyme mix with fidelity approaching that of Pfu DNA polymerase, yet without Pfu's low processivity and long cycle times.

#### UNMATCHED FLEXIBILITY AND EASE OF USE.

- **Choice of One-Step or Two-Step RT-PCR Reactions.** The High Fidelity Kit offers the ease of a one-step reaction and the flexibility of two-step RT-PCR when needed.
- **Unique PreMix Reduces Pipetting Steps.** No other high fidelity RT-PCR kit comes with the convenience of an RT-PCR PreMix solution. The MasterAmp 2X RT-PCR PreMix contains dNTPs, MgCl<sub>2</sub>, and buffer all in one vial—you do not need to add these components separately. This reduces reaction set-up time and lowers the chances of contamination.
- **Random Cloning Primers Included.** The MasterAmp High Fidelity RT-PCR Kit includes both oligo (dT)<sub>18</sub> and random nonamer primers.

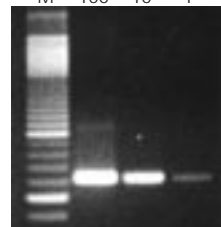
### High Sensitivity RT-PCR in a One-Step Reaction MasterAmp™ RT-PCR Kit (for high sensitivity)

**EXTREME SENSITIVITY FOR DETECTION OF LOW-LEVEL MESSAGES.** The MasterAmp™ RT-PCR Kit provides the highest sensitivity available, which is vital for applications such as the detection of low abundance RNAs. This kit can generate cDNA from as little as 1 picogram of total cellular RNA. (See Figure 1.)

**ONE-STEP, ONE-TUBE REACTION.** The MasterAmp RT-PCR Kit utilizes a single thermostable enzyme (RetroAmp™ RT DNA Polymerase) for both its RT and PCR steps. Thus, RT-PCR can be performed with a one-step reaction using a single tube.

**HIGH TEMPERATURE RT TO OVERCOME DIFFICULT RNA SECONDARY STRUCTURE.** The MasterAmp RT-PCR Kit allows high temperature cDNA synthesis, thus avoiding problems often caused by RNA secondary structure. Reverse transcription can be conducted at temperatures as high as 68°C when required for primers with melting points greater than 60°C.

Picograms of total RNA  
M 100 10 1



**Figure 1. RT-PCR amplification of human chorionic gonadotropin alpha (CGα) with limiting amounts of RNA using the MasterAmp RT-PCR Kit.** Human CGα was amplified from serial dilutions of human total cellular placental RNA using standard conditions. Lane 1, 100 bp ladder.

#### BOTH KITS PROVIDE BETTER AMPLIFICATION OF HIGH G+C TEMPLATES.

EPICENTRE's MasterAmp™ PCR Enhancement Technology (with betaine)<sup>+</sup> can substantially improve the yield and specificity of amplification reactions, especially for particularly difficult amplifications such as templates with high G+C content or secondary structure.

### Comparison of EPICENTRE's MasterAmp™ RT-PCR Kits

Features:	<b>New</b> MasterAmp™ High Fidelity RT-PCR Kit	MasterAmp™ RT-PCR Kit* (for high sensitivity)
Highest Fidelity	4	
Highest Sensitivity		4
Enzymes	MMLV-RT Plus and MasterAmp™ TAQurate™ DNA Polymerase Mix	RetroAmp™ RT DNA Polymerase
Both One-Step and Two-Step Protocols	4	4
Includes a single PreMix containing dNTPs, MgCl <sub>2</sub> , and buffer	4	
Includes MasterAmp™ Enhancer Technology for Difficult Templates	4	4
Includes Random/Oligo dT Primers	4	
Longest Amplifications	4	
High Temperature cDNA Synthesis		4

<sup>+</sup>Patents issued and pending.

\*This is EPICENTRE's original RT-PCR Kit

#### MasterAmp™ High Fidelity RT-PCR Kit

RF91025-F71 25 Rxn  
RF910100-F71 100 Rxn

#### MasterAmp™ RT-PCR Kit (for high sensitivity)

RT71225-F71 25 Rxn  
RT712100-F71 100 Rxn

For more information, please circle reader service number N715 on the reply card found in the center insert or visit our website at

 [www.epicentre.com/catalog/hifi\\_rt-pcr.htm](http://www.epicentre.com/catalog/hifi_rt-pcr.htm)

or

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