



# **RT-ROSET Kit, Recombinant M-MLV (with RNase inhibitor)**

For Single Strand cDNA Synthesis

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#### **Kit Content**

Component	50 Reaction
MixZyme	100µl
RTmix (2X)	500µl
RT-PCR Grade Water	500µl
Control Primer Mix	50µl

## Storage

Shipment condition is checked by ROJETechnologies. After arrival, all components should be kept dry at -20 °C. When storage condition is as directed, all components are stable until expiration date, as indicated on the kit box.

## **Intended Use**

Notice that, these products are intended for molecular biology applications not for diagnostic use. We recommend all users to study RNA experiments guideline, before starting their work.

# **Guarantee & Warranty**

ROJETechnologies guarantees the efficiency of all manufactured kits and reagents. For more information on choosing proper kits based on your needs, please contact our technical support team. If any product does not satisfy you, due to reasons other than misuse, please contact our technical support team. If problem is due to manufacturing process, ROJE team will replace the Kit for you.

## **Notice to Purchaser**

This products are only for experiments and not for commercial use in any kind. No right to resell them or any components. For information about out licensing or distributors contact ROJE business team.

## **Warning and Precautions**

Due to chemical material usage that may be hazardous, always make sure to wear suitable lab coat, disposable gloves, and protective eyewear. Material Safety Data Sheet (MSDS) for all products and reagents are provided. They are accessible online at <u>www.rojetechnologies.com</u>.

# **Quality Control**

All ROJETechnologies products are tested against predetermined experiments on a lot-to-lot basis according to ROJETechnologies ISO-certified quality management system, to ensure consistent product quality. For your information, the results of all experiments are accessible by addressing REF and Lot number on web at <u>www.rojetechnoloes.com</u>.

# Description

RT-ROSET kit contains all necessary components for conversion of total RNA or mRNA to the single stranded cDNA. The RTmix solutions contains, RTbuffer, 1mM dNTP mixture, 8mM MgCl2, oligo d(T)16, Random hexamer and stabilizer. MixZyme contains thermostable H-minus MMLV, RNase Inhibitor and stabilizer.

## Features

- Easy protocol & Minimum pipetting steps
- RNase minus MMLV enzyme
- Long mRNA synthesis
- High temperature reaction to destabilize RNA secondary structures

# Protocol, first strand cDNA synthesis

• Mix the template RNA (total RNA or Poly(A)mRNA) and other kit components in RNasefree tube as below table.

#### Table1: Preparing cDNA synthesis

Component	Volume
Template RNA	1 ng -5µg
RTmix (2x)	10 µl
MixZyme	2 µl
RT-PCR Grade Water	Up to 20 µl

- Mix the above mixture by quick vortex.
- Incubate 10min at 25°C.
- Incubate 60min at 4°C.
- Stop the reaction by heating at 85°C for 5 minutes. Chill on the ice or at 4°C.

Note: To perform PCR, you can add the finished RT reaction up to 1/5 of the final PCR volume.

#### **cDNA Control PCR Reaction**

- Prepare a reaction mix according to the table.
- For negative tube use 2 µl of RT-PCR grade water. The final volume in each PCR reaction tubes is 20 µl.

**Note:** It is recommended that all of the PCR components be premixed in a sufficient quantity for daily needs and then dispensed into the individual reaction tubes.

#### Table2: Competent for each control PCR reaction

Item	Volume
ROMAX, 2X	10 µl
(order by Cat No EB983001 and EB983002)	
Control Primer Mix	1 µl
Template	2 µl
RT-PCR Grade Water	7 µl
Total Volume	20 µl

Table3: PCR Program for control primer

Cycle	Duration	Temp
1	4min	95 °C
35	30 sec	94 °C
	30 sec	57 °C
	30 sec	72 °C
1	5min	72 °C

#### Agarose gel Electrophoresis

Run the total 5-7  $\mu$ l of PCR products on a %2 agarose gel. The B2M primers amplify a band of approximately 230bp from human, mouse and rat 82M cDNA.

#### Disclaimers

This product is for research use only and should only be used by trained professionals.

# **Technical Assistance**

ROJETechnologies guarantee your complete satisfaction. ROJE technical support team is composed of highly trained, experienced scientists; who can troubleshoot most problems you face. Our technical support team can offer expert advice which may help you select a suitable product.

- Contact our technical support at any time by selecting one of these ways:
- Through our telephone and fax number; +982191070705.
- You can submit your question directly to ROJE Technical Support Team from our website (www.ROJETechnologies. com)
- Or send your questions to this email address, <a href="mailto:technicalsupport@rojetechnologies.com">technicalsupport@rojetechnologies.com</a>

## **Factory address**

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