RB MMLV Reverse Transcriptase (RNase H-)

Source:

Recombination of E.coli containing Moloney murine leukemia virus mutated reverse transcriptase gene from clone of Moloney murine.

Concentration: 200U/μl

Component: M-MLV （400U/μl）, 5×Buffer （with DTT）

Features:

lack RNase -H activity: Weak RNaseH activity High cDNA yield, can get more full length cDNA.

thermal stable: the optimum reaction temperature is 50C,the highest is 60C. Can overcome the template RNA secondary structure ,and finish the reverse transcriptase experiment smoothly.

wide temperature range: can reverse transcript from 37-60C,with more than 80% of the highest activity

at 42C-55C customer can choose the reaction temperature freely.

Strong amplification activity: Gene mutation enhanced the binding capacity of the enzyme and RNA.Increased the amplification speed, can obtain the quality cDNA, suitable for cDNA library construction.

Storeage: -20C

Unit Definition:

One unit of MMLV RT catalyzes the incorporation of 1 nmol of dTTP into acidinsoluble material in 10 minutes at 37C using oligo(dT)12-18-primed poly(A)n as a template.

Applications:

The first-strand cDNA synthesis; RT-PCR.

Storage Buffer:

20 mM Tris-HCl (pH7.5),200 mM NaCl, 0.25 mM EDTA,0.01% NP-40(v/v),2.5 mM DTT,50% glycerol

(v/v).

RB MMLV Reverse Tranccriptase

Office, floor, noorbaran Building, 22Bahman St,Bozorgmehr Ave, Isfahan, Iran
www.rnabiotec.com
www.dnarna.org
sales@dnarna.org
03132673138-39
09336700380-390

RB MMLV Reverse Tranccriptase

5X Reaction Buffer:

[5×RT Buffer] 250mM Tris-HCl (pH 8.3), 15mM MgCl2,375 mM KCl, 50mM DTT.

Preparation of RNA for RT-PCR

1. Add to an RNase-free PCR tube:
2. 8-10 µL RNA dissolved in double distil water (500 ng-5ug)
3. 1 µL of DNase I, Amplification Grade, 2 unit/mL
4. 1 ul DNase I, buffer
5. Mix gently with hand not vortexing, and incubate for 15 minutes at 37 Cº

Recommended Reaction Conditions:

The first-strand cDNA synthesis

1. Oligo dT12-18 (1µg/µl) or random primer (50-250ng) 1µl
2. Total RNA (10ng-5µg) or mRNA(10-500ng) 4-5µl
3. dNTP (10mM each) 1µl
4. DEPC ddH2O up to (10-12)µl
5. Gently mix and SHORT SPINE then incubate 10 Min at 65C then chilled on ice for 8-10min.
6. 5×RT Buffer 2-4µl
7. Gently mix and do a short spine
8. Add 1µl M-MLV RT（200U/µl), Incubate at 50C for 50min.

Inactivate at 72C for 15min then get the CDNA

Office, floor, noorbaran Building, 22Bahman St,Bozorgmehr Ave, Isfahan, Iran
www.rnabiotec.com
www.dnarna.org
sales@dnarna.org
03132673138-39
09336700380-390