

MMLV Reverse Transcriptase 1st-Strand

cDNA Synthesis Kit

Lucigen



50 Reaktionen

Artikel-Nr.: 150772 | **Lucigen** | Herstellernummer: MM070150

314,20 € *

*zzgl. MwSt. [zzgl. Versandkosten](#)

Beschreibung

Kit / Enzym: Kit

Primer im Kit enthalten: ja

Reaktionstemperatur: 37 °C

RNase H Aktivität: ja

Verpackung: 50 Reaktionen

Die im Kit enthaltene MMLV High Performance Reverse Transcriptase (MMLV HP RT) schreibt RNA in "full-length first-strand cDNA" um. Die MMLV besitzt nur schwache RNase H Aktivität.

Die Vorteile:

- Full-length cDNA aus Transkripten länger als 15 kb
- Die MMLV HP RT hat eine höhere Aktivität als vergleichbare Enzyme (Einsatz zur cDNA Synthese 100 Units statt 200 Units)
- Effiziente cDNA Synthese auch aus geringen Ausgangsmaterial (pg)
- Das Kit enthält sowohl Oligo(dT) als auch Random Primer
- RNase-Inhibitor schützt die Integrität der Template RNA

Inhalt des Kits:

- MMLV Reverse Transcriptase
- 10 x Reaktionspuffer
- ScriptGuard RNase Inhibitor
- dNTP PreMix
- DTT
- Oligo(dT)₂₁ Primer
- Random 9-mer Primer
- RNase-freies Wasser

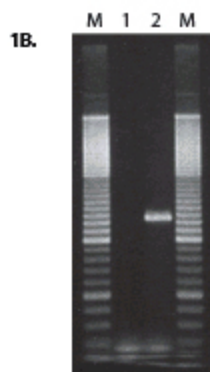
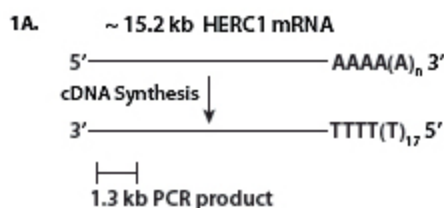


Figure 1. MMLV HP RT produces full-length cDNA from mRNA longer than 15 kb. Total RNA isolated from HeLa cells was reverse transcribed and the cDNA was amplified by PCR. Detection of the 1.3-kb PCR amplicon from near the 5' end of the mRNA demonstrates full-length reverse transcription of HERC1 mRNA (A). Agarose gel analysis of the PCR products shows the 1.3-kb amplicon from the 5' end of the mRNA (B). Lane M, 100 bp DNA ladder; lane 1, no-RT control reaction; lane 2, PCR product from cDNA synthesized by Epicentre's MMLV HP RT.

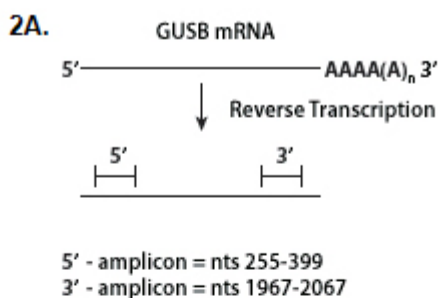
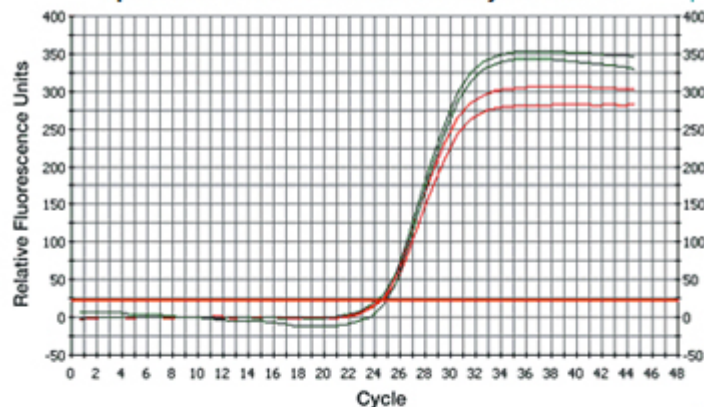


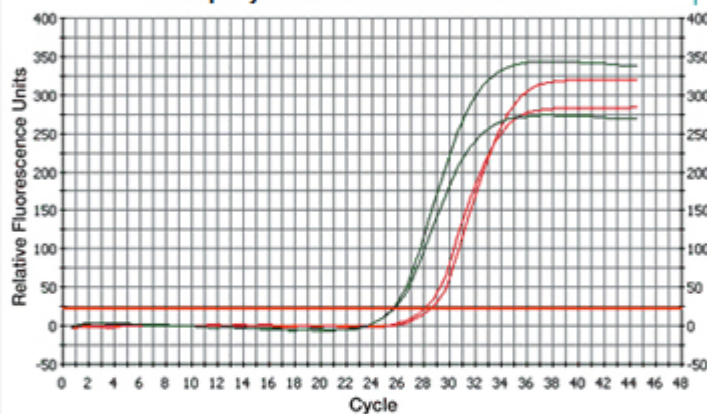
Figure 2. cDNA produced by Epicentre's MMLV High Performance Reverse Transcriptase yields a significantly improved 3'/5' ratio than competitive reverse transcriptases. The approximately 2160-base HeLa β -glucuronidase mRNA (GUSB) was reverse transcribed into cDNA using Epicentre's MMLV High Performance Reverse Transcriptase and two competitive reverse transcriptase enzymes. PCR primer pairs to the 3'-end and 5'-end of GUSB cDNA were synthesized and qPCR (SYBR[®] Green I dye detection) was performed using each primer pair and the GUSB cDNAs as templates. The 3'/5' ratio was calculated for each as described in the text. (A). PCR amplicons from the 3' end and 5' end of the GUSB cDNA. (B). qPCR quantification graphs for detecting the 3' amplicon and 5' amplicon of GUSB cDNA produced by Epicentre's MMLV High Performance Reverse Transcriptase Kit and two other commercially available reverse transcriptase enzymes.

2B.

Epicentre MMLV 1st-Strand cDNA Synthesis Kit



Company I RNase H- minus MMLV RT



Company P MMLV RT

