

# One step to superior real-time qRT-PCR

he SuperScript™ III Platinum® One-Step qRT-PCR Kit combines the leading reverse transcriptase and DNA polymerase technologies to give you optimal real-time quantitative RT-PCR results. By mixing SuperScript™ III Reverse Transcriptase with Platinum® Taq DNA Polymerase, this kit delivers the high specificity and sensitivity you need with one-step speed and convenience. Specially formulated for real-time applications, it is the ideal one-step system for detection with either LUX™ Fluorogenic Primers or dual-labeled probes.

## SuperScript™ III RT: the origin of success

SuperScript™ III Reverse Transcriptase (RT), a point mutant of SuperScript™ II RT with reduced RNase H activity, exhibits increased thermostability and higher cDNA yield. With SuperScript™ III RT in this one step format, you can synthesize cDNA at temperatures up to 60°C, giving you greater success with

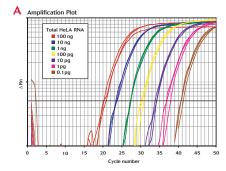
RNA secondary structure and increased priming specificity with gene-specific primers. Combined with the antibody-mediated hot-start capability of Platinum\* *Taq* DNA Polymerase, you are ensured superior sensitivity and specificity in your real-time qRT-PCR.

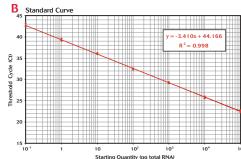
### **Prime performance with LUX™ Fluorogenic Primers**

The SuperScript™ III Platinum® One-Step qRT-PCR Kit is optimized to provide sensitive and specific real-time qRT-PCR with LUX™ Fluorogenic Primers. Just add total or poly(A)+ RNA, a set of custom-designed or Certified LUX™ Primers, and 2X Reaction Mix. It's that easy. Complete your analysis on any number of

instruments, including the ABI PRISM®, Roche LightCycler®, or the Corbett Research Rotor-Gene™. Figure 1 illustrates the high performance you can achieve using the SuperScript™ III Platinum® One-Step qRT-PCR Kit with LUX™ Primers.

Figure 1 - The SuperScript™ III Platinum® One-Step qRT-PCR Kit provides high performance with LUX™ Fluorogenic Primers.





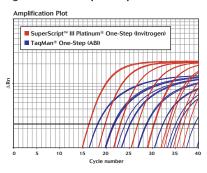
The human  $\beta$ -actin target was quantified by real-time RT-PCR using 10-fold serial dilutions of total HeLa RNA (100 ng to 0.1 pg) with 200 nM JOE-labeled LUX" Primer, 200 nM unlabeled primer, SuperScript" III Platinum\* One-Step qRT-PCR Kit, and ROX Reference Dye. Reactions were incubated for 10 min. at 50°C, then 2 min. at 95°C, followed by 50 cycles of 95°C, 15 sec.; 60°C, 30 sec. using an ABI PRISM\* 7700.

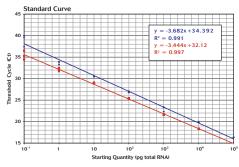
# Superior sensitivity with dual-labeled probes

The SuperScript™ III Platinum® One-Step qRT-PCR Kit also provides superior performance with dual-labeled probe detection systems, even compared to kits specifically designed

for the 5´ nuclease assay. Figure 2 demonstrates the increased sensitivity you achieve with the SuperScript™ III Platinum® One-Step qRT-PCR Kit over other kits.

Figure 2 - The SuperScript™ III Platinum® One-Step qRT-PCR Kit out-competes other one-step qRT-PCR kits.





The human  $\beta$ -actin target was quantified by real-time RT-PCR using 10-fold serial dilutions of total HeLa RNA (100 ng to 0.1 pg) with either the SuperScript<sup>TM</sup> III Platinum® One-Step qRT-PCR Kit from Invitrogen (red data) or the TaqMan® One-Step RT-PCR Master Mix from ABI (blue data), 200 nM each amplification primer, 100 nM TaqMan® Probe, and ROX Reference Dye. cDNA synthesis was performed at 50°C for 15 min, followed by 40 cycles of PCR using an ABI PRISM® 7700.

#### All-around performance, one-step convenience

Whether you choose LUX™ Fluorogenic Primers or dual-labeled probes, you'll get great performance with the SuperScript™ III One-Step qRT-PCR Kit. The one-tube, one-step format reduces reaction variability, lowers the risk of contamination, and gets

you results more quickly and easily. For performance and convenience, the SuperScript™ III Platinum® qRT-PCR Kit beats the competition.

### The right step

Take the right step to sensitive, specific real-time qRT-PCR. Order the SuperScript™ III Platinum® One-Step qRT-PCR Kit today.

Product	Quantity	Cat. no.
SuperScript™ III Platinum® One-Step qRT-PCR Kit	100 rxns	11732-020
	500 rxns	11732-088

#### Related products

For the most sensitive end point one-step RT-PCR system available, use the SuperScript<sup>m</sup> III One-Step RT-PCR System with Platinum<sup>m</sup> Taq.

	Quantity	Cat. no.
SuperScript™ III One-Step RT-PCR System with Platinum® <i>Taq</i>	25 rxns	12574-018
	100 rxns	12574-026

 $LUX^{TM}$  Fluorogenic Primers provide sensitive, specific, real-time PCR amplification and detection without probes, quenchers, or dyes. Visit www.invitrogen.com/lux for more information and to design and order  $LUX^{TM}$  Primers.

LUX™ Fluorogenic Primer Set, FAM-labeled	50 nmol
	200 nmol
LUX™ Fluorogenic Primer Set, JOE-labeled	50 nmol
	200 nmol



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#### Corporate headquarters:

1600 Faraday Avenue • Carlsbad, CA 92008 USA • Tel: 760 603 7200 • Fax: 760 602 6500 • Toll Free Tel: 800 955 6288 • E-mail: tech\_service@invitrogen.com www.invitrogen.com

Invitrogen Ltd • Inchinnan Business Park • 3 Fountain Drive • Paisley PA4 9RF, UK • Tel: +44 (0) 141 814 6100 • Fax: +44 (0) 141 814 6260 • E-mail: eurotech@invitrogen.com