



## High-yield cDNA synthesis directly from cells

The SuperScript™ III CellsDirect cDNA Synthesis Kit provides high-yield cDNA synthesis from as little as one cell, in a convenient, single-tube format. The system uses SuperScript™ III RT to synthesize cDNA with increased specificity, produce higher yields of cDNA, and synthesize full-length products up to 4.5 kb.

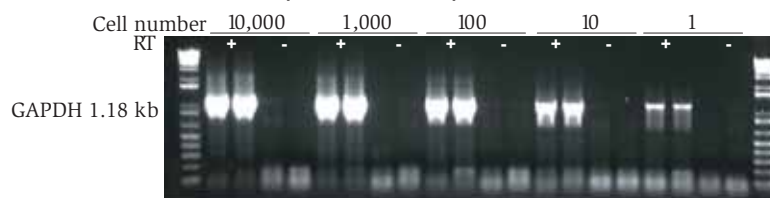
### cDNA from a single cell

The SuperScript™ III CellsDirect cDNA Synthesis Kit provides high yields of first-strand cDNA from 10,000 cells down to a single cell by serial dilution (Figure 1), minimizing sample loss from RNA isolation procedures and ensuring accurate representation of all transcripts.

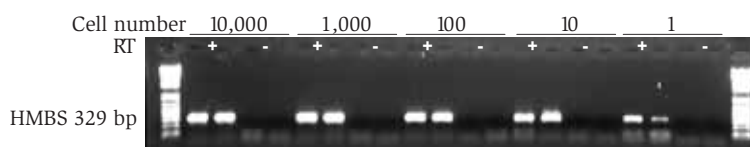
The increased thermostability and reduced RNase H activity of SuperScript™ III Reverse Transcriptase (RT) increases cDNA yields and offers full-length synthesis of fragments up to 4.5 kb in length.

**Figure 1 – The SuperScript™ III CellsDirect cDNA Synthesis Kit provides linear and robust cDNA yields from 1 to 10,000 cells**

**Panel A: cDNA from HeLa cells amplified with GAPDH primers (1.18 kb)**



**Panel B: cDNA from K562 cells amplified with HMBS primers (329 kb)**



cDNA was synthesized directly from serial dilutions of cells (10,000 cells to 1 cell) using the SuperScript™ III CellsDirect cDNA Synthesis Kit. 2 µl of each cDNA synthesis was used in a 50 µl PCR reaction. 20% of the PCR reaction was analyzed by electrophoresis on a 1% agarose gel.

### Formatted for convenience

The SuperScript™ III CellsDirect cDNA Synthesis Kit provides greater convenience than other synthesis methods. You can lyse mammalian cells, treat with DNase, and synthesize

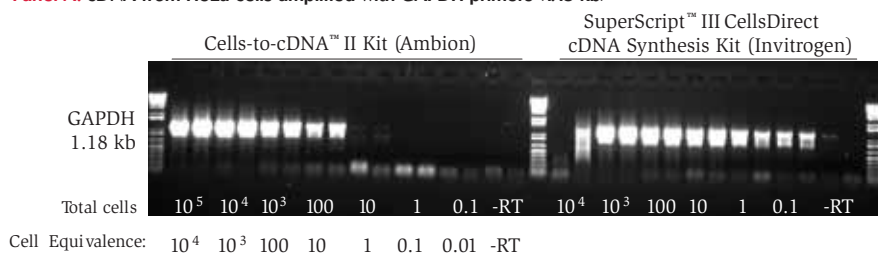
cDNA in a single tube, without a separate RNA purification step. The system is compatible with a wide variety of applications, including PCR.

## Outperforms the competition

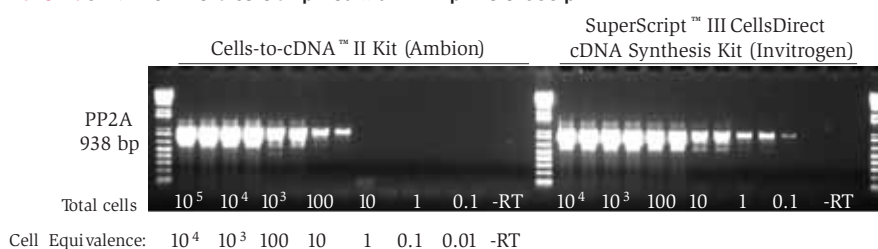
The SuperScript™ III CellsDirect cDNA Synthesis Kit outperforms the competition (Figure 2). The single tube format lets you go from cells to cDNA in less than 2 hours, while ensuring the highest yields of cDNA.

**Figure 2 – The SuperScript™ III CellsDirect cDNA Synthesis Kit outperforms the competition**

**Panel A: cDNA from HeLa cells amplified with GAPDH primers (1.18 kb)**



**Panel B: cDNA from HeLa cells amplified with PP2A primers (938 p)**



cDNA was synthesized from serial dilutions of HeLa cells using either the SuperScript™ III CellsDirect cDNA Synthesis Kit (Invitrogen) or the Cells-to-cDNA™ II Kit (Ambion) according to each manufacturer's specifications. 10% of each cDNA reaction was used in a 50 µl PCR reaction. 20% of the PCR reaction was analyzed by electrophoresis on a 1% agarose gel. Note: Due to protocol differences between manufacturers, cell numbers are provided to show both total cells and cell equivalents used in cDNA synthesis.

## Order yours today

Get high-yield, sensitive, and convenient cDNA synthesis directly from cells. Order the SuperScript™ III CellsDirect cDNA Synthesis Kit today.

Product	Quantity	Cat. no.
SuperScript™ III CellsDirect cDNA Synthesis Kit	25 rxns	18080-200
	100 rxns	18080-300



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