



**Human Mesenchymal Stem Cell-bone marrow cDNA**  
**[HMSC-bm cDNA]**  
Catalog number: 7504

**Product Information**

Quantity: Approximately 20 reactions  
Volume: 20  $\mu$ l  
Storage condition: Store at  $-20^{\circ}\text{C}$

**Product Description**

ScienCell Research Laboratories' PCR-ready first strand cDNA is prepared from RNA extracted from normal human primary cells by Qiagen RNeasy kits. 20  $\mu$ g of total RNA is reverse-transcribed in 200  $\mu$ l final volume using Applied Biosystems' High-Capacity cDNA Reverse Transcription kits. 1  $\mu$ l cDNA is sufficient for one PCR reaction.

**Quality Control**

- The  $A_{260}/A_{280}$  ratio of the cDNA is measured to be  $\sim 1.8$  using Beckman Coulter DU 800 spectrophotometer.
- The cDNA is performance-tested in a control polymerase chain reaction (PCR) using primers of beta-actin. Gel electrophoresis analysis of the PCR products is performed in 1% (w/v) agarose gel with GeneRuler™ 1kb Plus DNA Ladder, one major band of around 400 bp can be observed.

**Application**

- Immediate PCR amplification of known genes
- Comparison of gene expression patterns between biological samples
- Gene mutation analysis
- Analysis of mRNA alternative splicing
- Gene cloning and target sequencing



QC electrophoresis gel