

## Progenitor Proliferation in Clinical Samples

Tube No. 1: No. ABC0101001  
 Cryovial Barcode No. 00001010101  
**Date: March 18, 2009**

**Method:** The sample was received at STEMCELL Technologies on the 19th of March, 2009 and processed immediately. The volume of the sample was determined to be 2.0 mL. The nucleated cells in the samples were counted, the viability assessed by trypan blue exclusion and the cells resuspended at  $3 \times 10^5$  cell/mL in tissue culture media before plating in MethoCult<sup>®</sup> 04034.

Volume of sample: 2.0 mL  
 Cell count / mL:  $1.34 \times 10^6$ /mL  
 Total Cells:  $2.68 \times 10^6$   
 Viability: 94.7 %

Assays were set up in duplicate at  $1 \times 10^4$  and  $3 \times 10^4$  per dish for each Cord Blood sample. The cultures were incubated at 37°C, 5% CO<sub>2</sub> for 14 days, after which colonies were scored based on morphology.

**Results:** The sum of the triplicate cultures initiated at  $3 \times 10^4$  cells per dish is presented below. It should be noted that cultures initiated at  $1 \times 10^4$  cells per dish were under plated. The sum of the cultures initiated at  $3 \times 10^4$  cells per dish was used to determine the total CFC per mL in the original clinical sample received.

### Progenitor Proliferation

Sample	CFU-E	BFU-E	Total Erythroid	CFU-GM	CFU-GEMM	Total CFC
ABC0101001						
Average from 3 replicate plates	0+/-1	28+/-2	28+/-2	12+/-2	1+/-1	41+/-1
Total from $9 \times 10^4$ cells	1	83	84	36	4	124

Calculated viable cells/mL of clinical sample:  $1.34 \times 10^6$   
 Total CFC/mL of clinical sample:  $0.185 \times 10^4$

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 STEMCELL Technologies  
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**Appendix:**



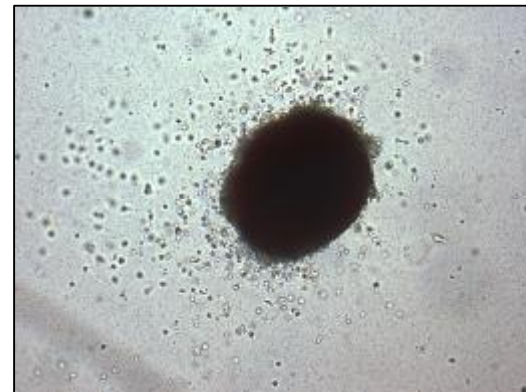
1. Colonies from ABC0101001 plated at  $3 \times 10^4$  cells/dish in MethoCult® 04034 (15X)



2. BFU-E from ABC0101001 in MethoCult® 04034 (70X)



3. CFU-GM from ABC0101001 in MethoCult® 04034 (30X)



4. CFU-GEMM from ABC0101001 in MethoCult® 04034 (70X)