Supplementary Table 1 Limiting dilution analysis of the frequency of LTRCMLs in NOD/SCID mice injected with low-density lin ${ }^{-}$ALDH $^{+}$human cord blood cells

| No. of cells per mouse | Positive mice/total <br> after 20 weeks |
| :--- | :--- |
|  | $3 / 4$ |
| 10,000 | $1 / 1$ |
| 8,000 | $1 / 3$ |
| 3,000 | $2 / 4$ |
| 1,000 |  |

NOD/SCID mice were injected with varying numbers of low-density lin-ALDH ${ }^{+}$cord blood cells and 20 weeks later their marrows were assessed for the presence of both human B-lymphoid and human myeloid cells. The frequency of LTRC-MLs was determined from data pooled from 4 experiments as described in the Methods.

Supplementary Table 2 Limiting dilution analysis of the frequency of LTRCMLs in the CD133 ${ }^{+}$and CD133 subsets of low-density lin ${ }^{-}{ }^{\circ}{ }^{\circ} 3^{-}$ALDH $^{+}$human cord blood cells

| Subset of CD38- ALDH <br> cells injected | No. of <br> cells per <br> mouse | Positive <br> mice/total <br> after 20 weeks | LTRC-ML frequency <br> $( \pm$ SEM $)$ |
| :--- | :--- | :--- | :--- |
| CD133 |  |  |  |

NOD/SCID mice were injected with matching isolates of CD133 ${ }^{+}$and CD133 cells from the same pool of low-density $\operatorname{lin}^{-} \mathrm{CD}^{-} 8^{-} \mathrm{ALDH}^{+}$cord blood cells and 20 weeks later their marrows were assessed for the presence of both lymphoid and myeloid human cells. The frequency of LTRC-MLs was determined as described in the Methods.

## Supplementary Table 3 Limiting dilution analysis of the frequency of LTRCMLs in the $\mathrm{ALDH}^{+}$subset of low-density lin ${ }^{-}$CD7 ${ }^{-}$CD36 ${ }^{-}$CD38${ }^{-1}$ fraction of human cord blood cells

| No. of cells per mouse | Positive mice/total <br> after 20 weeks |
| :--- | :--- |
| 4,000 | $4 / 4$ |
| 3,000 | $3 / 3$ |
| 1,000 | $5 / 5$ |
| 500 | $7 / 10$ |
| 400 | $2 / 3$ |

NOD/SCID mice were injected with varying numbers of cells and 20 weeks later their marrows were assessed for the presence of both lymphoid and myeloid human cells. The frequency of LTRC-MLs was determined as described in the Methods. Mice were considered positive only if both human myeloid and human B-lymphoid cells were present. Data are pooled from 3 experiments.

