CORRIGENDUM

Regulation of IL-2 expression by transcription factor BACH2 in umbilical cord blood CD4⁺ T cells

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Leukemia (2008) **22**, 2293–2294; doi:10.1038/leu.2008.292

Correction to: *Leukemia* (2008) **22**, 2201–2207; doi:10.1038/leu.2008.234; published online 4 September 2008

Since the publication of the above article, the authors have identified errors in Figures 1 and 2.

The correct figures are shown here.

The authors apologize for any inconvenience caused.

Figure 1 (a) Relative Broad-complex-Tramtrack-Bric-a-Brac and Cap'n/collar homology 1 bZip transcription factor 2 (BACH2) and nuclear factor of activated T cells (NFAT1) mRNA expression in umbilical cord blood (UCB) and adult peripheral blood (PB) CD4⁺ T cells. qRT-PCR of resting and CD3/CD28-stimulated UCB and adult CD4⁺ T cells was performed. Data are presented as the relative mRNA expression in three different UCB CD4⁺ T-cell preparations and at least three different adult PB CD4⁺ T-cell preparations. BACH2 mRNA expression was up to fourfold higher in UCB CD4⁺ compared with adult controls. Error bars represent s.e.m. (***P*<0.05). (b) BACH2 protein expression in adult PB and UCB CD4⁺ T cells. Total resting UCB and adult PB CD4⁺ T cells were analyzed by western blot for BACH2. BACH2 protein in total UCB CD4⁺ T cells, compared with total adult PB CD4⁺ T cells, was 3.9 (±0.072)-fold higher (*P*=0.0001). BACH2 was normalized against the control β-actin. (c) Protein expression of BACH2 in naive adult PB and UCB CD4⁺CD45RA⁺ T cells. Resting naive UCB and adult CD4⁺ T cells were analyzed by western blot for BACH2. BACH2 protein in UCB naive CD4⁺ T cells compared with adult naive CD4⁺ T cells was 1.63 (±0.545)-fold higher (*P*=0.044). BACH2 was normalized against the control β-actin. Images are representative of multiple western blots from at least three different UCB units and adult samples.

Figure 2 Broad-complex-Tramtrack-Bric-a-Brac and Cap'n'collar homology 1 bZip transcription factor 2 (BACH2) and interleukin (IL)-2 effectively inhibited by BACH2 siRNA in UCB CD4⁺ T cells. Umbilical cord blood (UCB) CD4⁺ T cells were transfected with BACH2 siRNA or control siRNA. At 24 h after transfection, an aliquot of cells was harvested (resting), and the remaining cells were stimulated with anti-CD3/CD28 antibodies for 6 h. **(a)** qRT-PCR analysis of nuclear factor of activated T cells (NFAT1)- and NFAT1-dependent genes in UCB CD4⁺ T cells transfected with BACH2 siRNA. Relative mRNA expression of BACH2, NFAT1, and IL-2 was compared between BACH2 siRNA-treated and control siRNA-treated UCB CD4⁺ T cells. Results are the average of three separate knockdown transfections with three different UCB units. Error bars represent s.e.m. (** $P < 0.002$). **(b)** BACH2 expression in UCB CD4⁺ T cells transfected with BACH2 siRNA. CD4⁺ T cells from cord units ($n > 3$) were treated with BACH2 siRNA (+) or control siRNA (-). Whole cell lysates from BACH2 siRNA-treated and control siRNA-treated UCB CD4⁺ T cells were analyzed for BACH2 by western blot. β-Actin was used as a loading control for all blots. BACH2 protein expression was undetectable in BACH2 siRNA treated UCB CD4⁺ T cells. **(c)** IL-2 expression in UCB CD4⁺ T cells transfected with BACH2 siRNA. Whole cell lysates from BACH2 siRNA-treated and control siRNA-treated UCB CD4⁺ T cells were analyzed for IL-2 by western blot. IL-2 protein was not detectable in BACH2 siRNA-treated UCB CD4⁺ T cells. **(d)** BACH2 and IL-2 protein expression in BACH2 siRNA-treated UCB CD4⁺ T cells. Results are the average of different cord blood units ($n > 3$) treated with BACH2 siRNA or with control siRNA analyzed from at least three different western blots. The image intensity was normalized against β-Actin. Error bars represent the s.e.m. BACH2 protein decreased by $51.7 \pm 7.2\%$ ($P = 0.001$) of control UCB CD4⁺ T cells, whereas the IL-2 protein decreased by $78.9 \pm 12\%$ ($P = 0.0004$) of control UCB CD4⁺ T cells.