







OPEN

Author Correction: Pluripotent stem cell model of Shwachman–Diamond syndrome reveals apoptotic predisposition of hemoangiogenic progenitors

Takayuki Hamabata, Katsutsugu Umeda, Kagehiro Kouzuki, Takayuki Tanaka, Tomoo Daifu, Seishiro Nodomi, Satoshi Saida, Itaru Kato , Shiro Baba, Hidefumi Hiramatsu, Mitsujiro Osawa, Akira Niwa, Megumu K. Saito , Yasuhiko Kamikubo, Souichi Adachi, Yoshiko Hashii, Akira Shimada, Hiroyoshi Watanabe, Kenji Osafune , Keisuke Okita , Tatsutoshi Nakahata, Kenichiro Watanabe, Junko Takita & Toshio Heike

Correction to: *Scientific Reports* <https://doi.org/10.1038/s41598-020-71844-8>, published online 09 September 2020

This Article contains an error in the Results section, under subheading ‘Apoptotic predisposition of SDS-iPSC-derived hemoangiogenic progenitors.’

“We then investigated the underlying mechanism of the SDS-associated apoptotic predisposition at the hemoangiogenic progenitor stage (Fig. 6a).”

should read:

“We then investigated the underlying mechanism of the SDS-associated apoptotic predisposition at the hemoangiogenic progenitor stage (Fig. 6a). We confirmed that plasmids encoding shRNA against *TP53* were not integrated in all SDS-iPSC clones used in Fig. 6.”

In addition, there is an error in the order of the Figures. Figures 2 and 3 are published as Figures 3 and 2 respectively. The correct Figures 2 and 3 appear below as Figures 1 and 2. The Figure legends are correct.

Finally, in the Supplementary Information file, the labels for the original Western blots for Figure 2b are reversed. The correct version of the blots appears below as Figure 3.

Published online: 18 January 2021

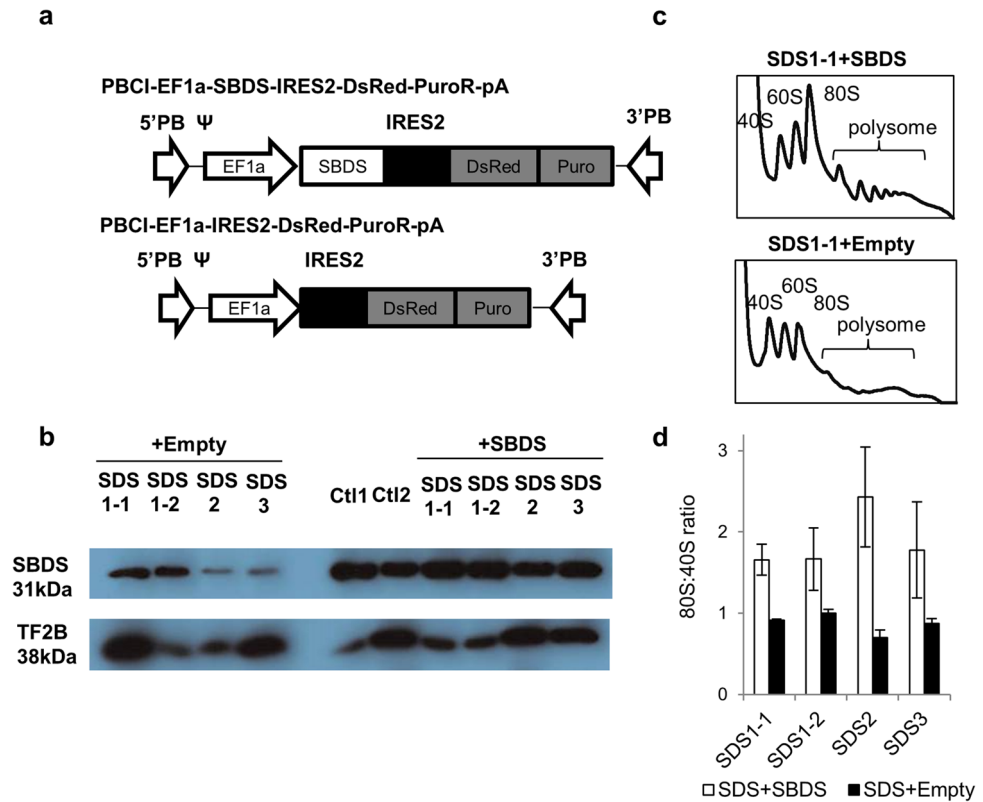


Figure 1. Impaired granulopoiesis during in vitro differentiation from SDS-iPSCs. **(a)** Outline of the defined, step-wise differentiation protocol for generation of mature neutrophils. **(b)** May–Giemsa staining of floating HCs obtained from SDS-iPSC clones transduced with SBDS or empty vector, and from control iPSCs on day 30 of differentiation. Scale bar: 100 μ m. **(c)** Sequential analysis of the number of floating HCs generated from control SDS-iPSCs, SBDS-overexpressing SDS-iPSCs, and control iPSCs. **(d)** Sequential analysis of the number of floating HCs generated from SDS-iPSC clones transduced with SBDS or empty vector. **(e)** Chemotactic activity of floating HCs generated from SDS-iPSC clones transduced with SBDS or empty vector in response to fMLP. fMLP-treated samples were presented as the fold change to untreated control sample. **(f)** Number of hematopoietic colonies derived from SDS-iPSC clones transduced with SBDS or empty vector, and from control iPSCs. **(g)** Light micrographs (upper rows) and May–Giemsa staining of hematopoietic colonies (lower rows) generated from SDS-iPSC clones transduced with SBDS or empty vector, and from control iPSCs. Scale bar: 100 μ m. Data represent means \pm SEM of triplicate wells; representative results from one of three independent experiments are shown ($*P < 0.05$).

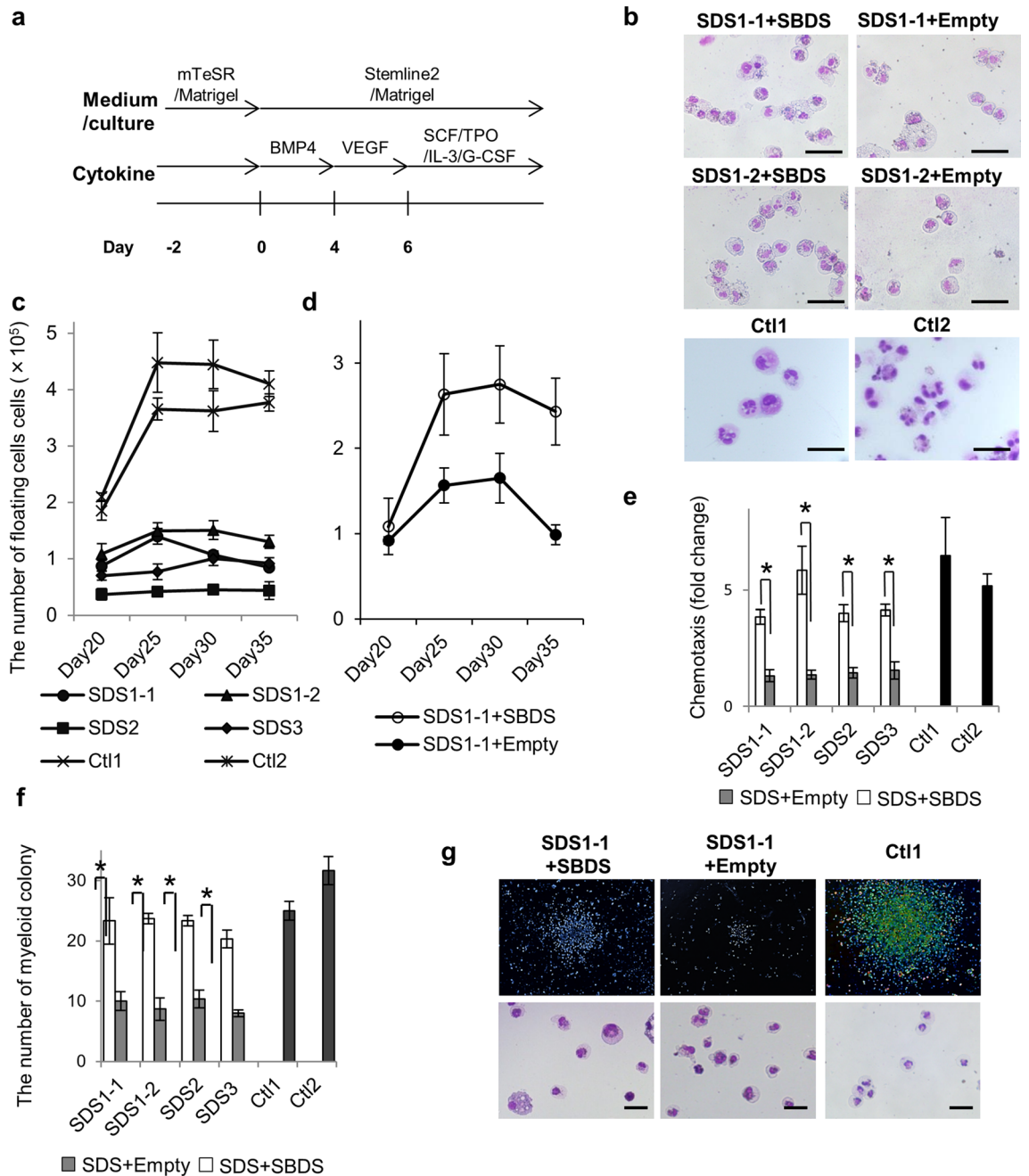


Figure 2. Transduction of SDS-iPSCs. **(a)** Construction of lentiviral vectors containing DsRed alone (PBCL-EF1a-DsRed-PuroR-pA) or SBDS cDNA and DsRed (PBCL-EF1aSBDS-IRES2-DsRed-PuroR-pA). **(b)** Western blotting analysis of SBDS protein in SDS-iPSC clones transduced with SBDS or empty (DsRed alone) vector. TF2B was used as a loading control. “+ SBDS” indicates iPSC clones transduced with SBDS vector. **(c)** Representative polysome profiling of SDS-iPSC clones transduced with SBDS or empty vector. **(d)** 80S:40S ratio in SDS-iPSC clones transduced with SBDS or empty vector.

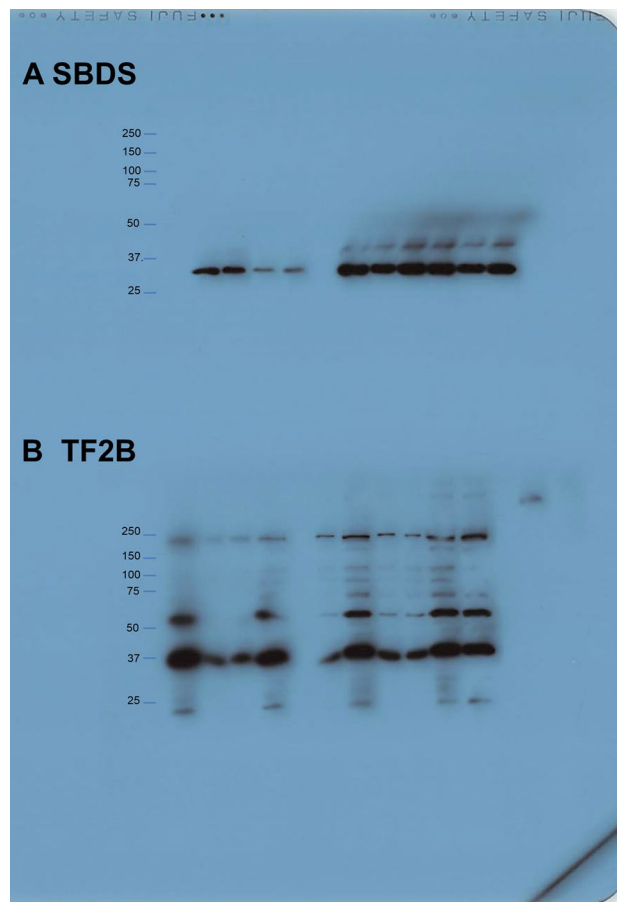


Figure 3. A correct version of the original Western blots for Figure 2b in the Supplementary Information file.



Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

© The Author(s) 2021