



OPEN ACCESS

EDITED AND REVIEWED BY
Harry Wicher,
Wageningen University and Research,
Netherlands

*CORRESPONDENCE
Svetlana Karakhanova
Karakhanova@uni-heidelberg.de

SPECIALTY SECTION
This article was submitted to
Nutritional Immunology,
a section of the journal
Frontiers in Immunology

RECEIVED 22 June 2022
ACCEPTED 20 October 2022
PUBLISHED 07 December 2022

CITATION
Wang Y, Petrikova E, Gross W,
Sticht C, Gretz N, Herr I and
Karakhanova S (2022) Corrigendum:
Sulforaphane promotes dendritic cell
stimulatory capacity through
modulation of regulatory molecules,
JAK/STAT3- and microRNA-signaling.
Front. Immunol. 13:975653.
doi: 10.3389/fimmu.2022.975653

COPYRIGHT
© 2022 Wang, Petrikova, Gross, Sticht,
Gretz, Herr and Karakhanova. This is an
open-access article distributed under
the terms of the [Creative Commons
Attribution License \(CC BY\)](#). The use,
distribution or reproduction in other
forums is permitted, provided the
original author(s) and the copyright
owner(s) are credited and that the
original publication in this journal is
cited, in accordance with accepted
academic practice. No use,
distribution or reproduction is
permitted which does not comply with
these terms.

Corrigendum: Sulforaphane promotes dendritic cell stimulatory capacity through modulation of regulatory molecules, JAK/STAT3- and microRNA-signaling

Yangyi Wang¹, Emilia Petrikova¹, Wolfgang Gross¹,
Carsten Sticht², Norbert Gretz², Ingrid Herr¹
and Svetlana Karakhanova^{1*}

¹Section Surgical Research, Molecular OncoSurgery Group, Department of General, Visceral and Transplantation Surgery, University of Heidelberg, Heidelberg, Germany, ²Medical Research Center, Medical Faculty Mannheim, University of Heidelberg, Mannheim, Germany

KEYWORDS

sulforaphane, dendritic cells, T cells, regulatory molecules, STAT3, miRNAs, pancreatic cancer

A Corrigendum on:

[Sulforaphane promotes dendritic cell stimulatory capacity through modulation of regulatory molecules, JAK/STAT3- and microRNA-signaling.](#)

by Wang Y, Petrikova E, Gross W, Sticht C, Gretz N, Herr I and Karakhanova S (2020) *Front. Immunol.* 11:589818. doi: 10.3389/fimmu.2020.589818

In the published article, there was an error in [Figure 2](#) as published. The representative images of flow cytometry in [Figure 2D](#), “CD25/CD69/FluorDye _ SF 10” and “CD25/CD69/FluorDye _ SF 30” were accidentally mixed up and three words “fluorescent intensity (MFI)” were misplaced in [Figure 2D](#) legend. The corrected [Figure 2](#) and its legend appear below.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

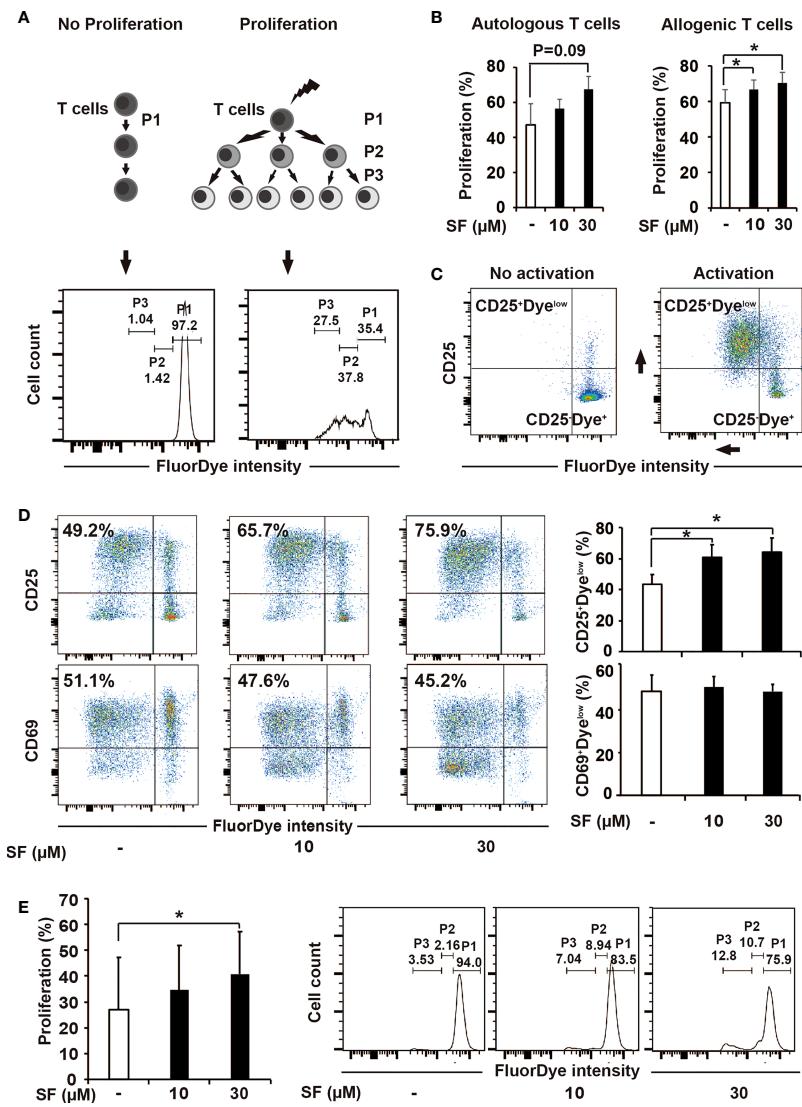


FIGURE 2

Sulforaphane improves stimulatory capacity of dendritic cells (DCs). **(A, B)** The principle and evaluation of proliferation assay. **(A)** Difference in the activation ability towards T cells was assessed by the distribution of FluorDye among proliferating cells. The representative histograms show the gating strategy of a non-proliferating (P1) and proliferating T-cell populations (P2 and P3) in negative and positive control. The numbers indicate different percentages of each portion from one representative experiment. **(B)** Mature monocyte-derived dendritic cells (MoDCs) were treated with sulforaphane (SF) at indicated concentrations or vehicle control for 48 h. The same amount of DCs were co-incubated with autologous or allogenic FluorDye-labeled peripheral blood mononuclear cells (PBMCs) at ratio 1:10 for 5 days, with the addition of CD3/CD28 purified antibodies. The proliferation of T cells was analyzed by flow cytometry and FlowJo software. The sum of P2 and P3 percentage was used as a Proliferation percentage (%), $n = 4$. **(C, D)** The principle of assessment and evaluation of T-cell late activation marker CD25. **(C)** The dot plot on the left indicates a non-proliferating T-cell population (negative control), composing to a large extent CD25⁺Dye^{high} population. During T-cell activation (positive control), FluorDye distributes among daughter cells leading to the FluorDye signal shift to the left in X-axis, and the CD25 shift in Y-axis, forming CD25⁺Dye^{low} population. Representative dot plots are shown. **(D)** Co-incubation of DCs and PBMCs was performed as in 2B. Cells were labeled with CD25-V450 and CD69-APC-Cy7 antibodies and analyzed by flow cytometry and FlowJo software. The data are presented as mean \pm SD. Dot plots provide the data from one representative experiment, $n = 4$. **(E)** Sulforaphane affects stimulatory capacity of DCs in presence of pancreatic cancer antigens. Tumor lysate was prepared and used to treat MoDCs for 24 h. MoDCs were matured and treated with sulforaphane at indicated concentrations or vehicle control for 48 h. The co-incubation was performed and analyzed as shown in **(B)**. Representative histograms are shown on the right, $n = 4$. * $P \leq 0.05$.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated

organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.