

















<https://doi.org/10.1038/s41467-019-09536-9>

OPEN

Addendum: A FRET biosensor for necroptosis uncovers two different modes of the release of DAMPs

Shin Murai ¹, Yoshifumi Yamaguchi ², Yoshitaka Shirasaki ^{3,4}, Mai Yamagishi ⁴, Ryodai Shindo ¹, Joanne M. Hildebrand ^{5,6}, Ryosuke Miura ^{1,7}, Osamu Nakabayashi ¹, Mamoru Totsuka ⁸, Taichiro Tomida ⁹, Satomi Adachi-Akahane ⁹, Sotaro Uemura ⁴, John Silke ^{5,6}, Hideo Yagita ¹⁰, Masayuki Miura ¹¹ & Hiroyasu Nakano ^{1,12}

Addendum to: *Nature Communications* <https://doi.org/10.1038/s41467-018-06985-6>, published online 26 October 2018

It has come to our attention that the human SMART biosensor reported in this Article does not contain SAGG repeats replacing the a and b regions corresponding to MLKL, as described. Following requests for murine and human SMART cDNAs, we were alerted that the sequence of human SMART is identical to human alpha15 ($\alpha 15$), which was a prototype of human SMART. We checked the sequence of the FRET biosensor integrated into HT29- and HaCaT cells, described in Figures 6 and 7, and found that it is human $\alpha 15$ and not our reported human SMART sequence (Figure. 1). To confirm that the human $\alpha 15$ construct behaves in the same way as the sensor described as human SMART, we regenerated stably transfected HT29 and HaCaT cells expressing the human $\alpha 15$ construct. As shown in Figure. 2, TNF+BV6+zVAD and PolyIC+BV6+zVAD induce an increase in the FRET/CFP ratio of human $\alpha 15$ in HT29 and HaCaT cells, respectively. This error does not affect the results or any conclusions of the Article.

Published online: 25 April 2019



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 license, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license 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 license, visit <http://creativecommons.org/licenses/by/4.0/>.

© The Author(s) 2019

¹Department of Biochemistry, Toho University School of Medicine, 5-21-16 Omori-Nishi, Ota-ku, Tokyo 143-8540, Japan. ²Hibernation Metabolism, Physiology, and Development Group, Environmental Biology Division, Institute of Low Temperature Science, Hokkaido University, Kita 19, Nishi 8, Kita-ku, Sapporo, Hokkaido 060-0819, Japan. ³Precursory Research for Embryonic Science and Technology, Japan Science and Technology Agency, Chiyoda-ku, Tokyo 102-0075, Japan. ⁴Department of Biological Sciences, Graduate School of Science, The University of Tokyo, 7-3-1 Bunkyo-ku, Tokyo 113-0033, Japan. ⁵Division of Cell Signaling and Cell Death, The Walter and Eliza Hall Institute of Medical Research, Parkville, VIC 3052, Australia. ⁶Department of Medical Biology, University of Melbourne, Parkville, VIC 3050, Australia. ⁷Laboratory of Molecular Biology and Immunology, Department of Biological Science and Technology, Faculty of Industrial Science and Technology, Tokyo University of Science, 6-3-1 Niijuku, Katsushika-ku, Tokyo 125-8585, Japan. ⁸Department of Food Science and Technology, Faculty of Applied Life Science, Nippon Veterinary and Life Science University, 1-7-1 Kyonancho, Musashino-shi, Tokyo 180-8602, Japan. ⁹Department of Physiology, Toho University School of Medicine, 5-21-16 Omori-Nishi, Ota-ku, Tokyo 143-8540, Japan. ¹⁰Department of Immunology, Juntendo University Graduate School of Medicine, 2-1-1 Hongo, Bunkyo-ku, Tokyo 113-8421, Japan. ¹¹Department of Genetics, Graduate School of Pharmaceutical Sciences, The University of Tokyo, 7-3-1 Bunkyo-ku, Tokyo 113-0033, Japan. ¹²Host Defense Research Center, Toho University School of Medicine, 5-21-16 Omori-Nishi, Ota-ku, Tokyo 143-8540, Japan. Correspondence and requests for materials should be addressed to H.N. (email: hiroyasu.nakano@med.toho-u.ac.jp)

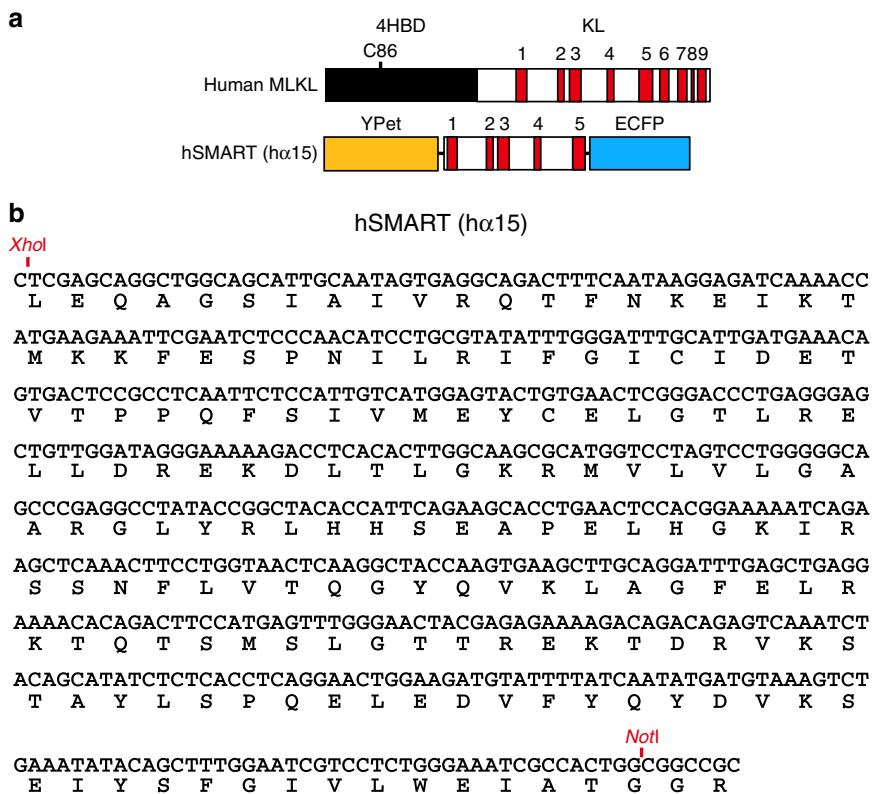


Fig. 1

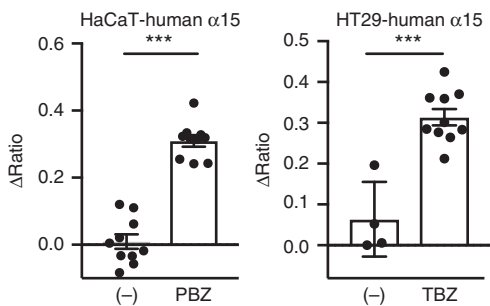


Fig. 2