## **iScience**

### Correction



# Role of adipocyte Na,K-ATPase oxidant amplification loop in cognitive decline and neurodegeneration

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In the originally published version of this article, the authors inadvertently displayed oversaturated bands in the western blot experiments for the following figures: Figures 2C-2F, 3G-3I, S2A-S2C, and S4B-S4D. This occurred because the images were obtained and displayed as 8-bit/ channel RGB color images on the Li-Cor Infrared Imaging System, which has a tendency to be oversaturated, and therefore raised concerns about the reliability of the data. These figures are now replaced with the original 16-bit grayscale images along with their corresponding guantification. Additionally, the authors were unable to retrieve the 16-bit image of the western blot in Figure S4B (Gel-2 GAPDH) from the infrared scanner. Consequently, they repeated the western blots for Figure S4, and the new data have been included in this corrected manuscript. The STAR Methods section was updated to report the image acquisition issues and a clear description of the western blot experimental procedures, image analysis, and any adjustments or modifications made to the images for analysis or during figure preparation. Finally, three key references in the manuscript have been updated and one reference (Sodhi et al., 2018, Sci. Rep. 8, 9721, https://doi.org/10.1038/s41598-018-26768-9) has been removed. These changes were crucial to ensure accurate citation of the original articles, which were initially retracted but subsequently revised and republished, and are essential for supporting the methodology presented in this article. The updated citations are included in the references list below.

These changes have been made in the original article online and were deemed necessary by the editorial team to uphold iScience's publication criteria. All changes have undergone peer review and do not affect the original scientific conclusion of the paper. The raw data and reanalyses have been deposited in Mendeley (https://doi.org/10.17632/29pcjp2xk7.2) to ensure transparency and reproducibility. The authors confirm these changes and agree that these have no impact on the study's outcome or conclusions. The authors apologize for any confusion and inconvenience caused to readers.

#### REFERENCES

Sodhi, K., Maxwell, K., Yan, Y., Liu, J., Chaudhry, M.A., Xie, Z., and Shapiro, J.I. (2023a). pNaKtide Inhibits Na/K-ATPase Signaling and Attenuates Obesity. J. Clin. Med. Sci. 7. https://doi.org/10.35248/2593-9947.23.7.238.

Sodhi, K., Srikanthan, K., Goquet-Rubio, P., Nichols, A., Nawab, A., Shah, P., Chaudhry, M., El-Hamdani, M., Xie, Z., and Shapiro, J. (2023b). Inhibition of Na/K-ATPase signaling Attenuates Steatohepatitis and Atherosclerosis in Mice Fed a Western Diet. Cell Mol. Biol. (Noisy-legrand) 69, 162–171. https://doi.org/10.14715/cmb/2023.69.2.27.

Sodhi, K., Wang, X., Chaudhary, M.A., Lakhani, H.V., Zehra, M., Nawab, A., Cottrill, C.L., Bai, F., Liu, J., Sanabria, J.R., et al. (2023c). Adipocyte Na, K-ATPase Signaling Attenuates Experimental Uremic Cardiomyopathy. Cell Mol. Biol. (Noisy-le-grand). 69, 197–206. https://doi.org/10. 14715/cmb/2023.69.5.31.



## iScience Correction

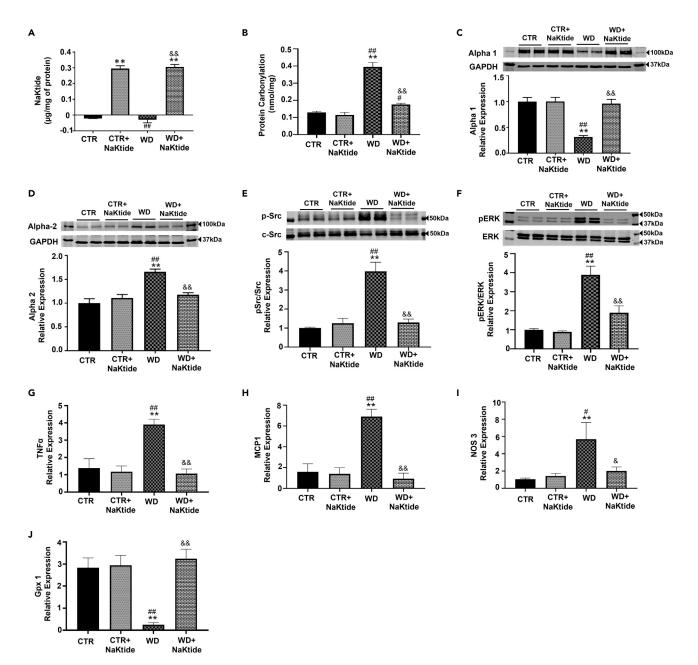


Figure 2. Doxycycline induced adipocyte-specific NaKtide expression improves oxidative stress in visceral adipose tissue of mice fed a WD (original)

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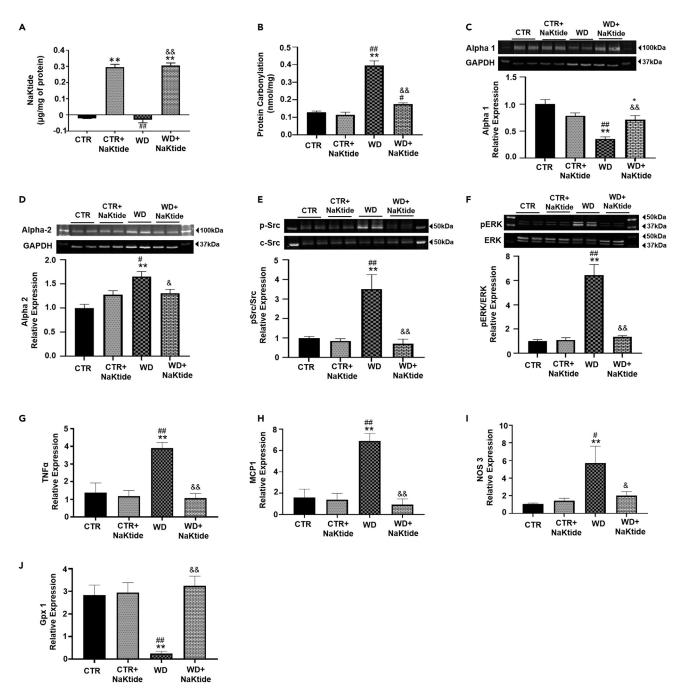
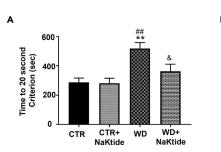
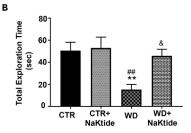


Figure 2. Doxycycline induced adipocyte-specific NaKtide expression improves oxidative stress in visceral adipose tissue of mice fed a WD (corrected)

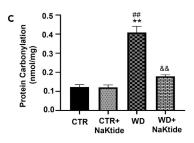


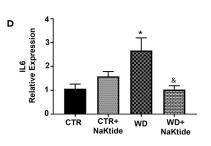


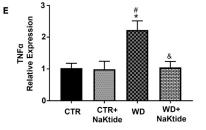


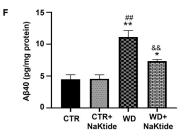


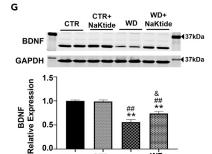
Hippocampus











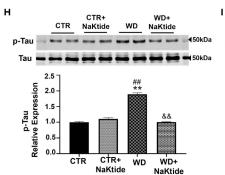
CTR+ NaKtide

CTR

wb+

NaKtide

WD

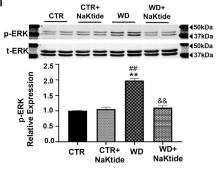


wD+

NaKtide

ŵD

CTR



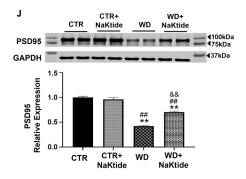
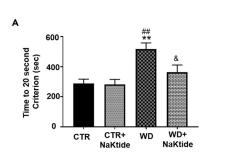
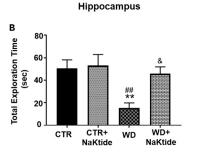


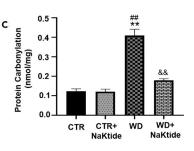
Figure 3. Doxycycline induced adipocyte-specific NaKtide expression improves behavioral function, neuroinflammation and markers of cognitive function in the hippocampus of mice fed a WD (original)

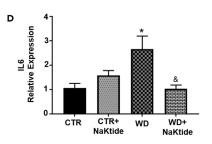


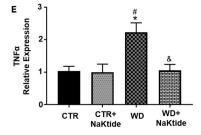


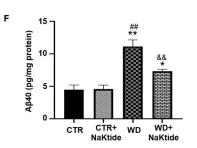


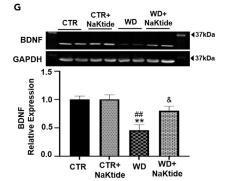


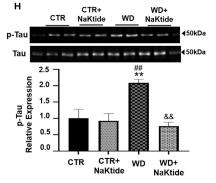


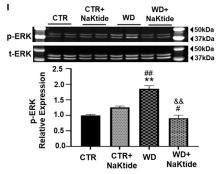












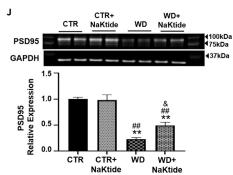


Figure 3. Doxycycline induced adipocyte-specific NaKtide expression improves behavioral function, neuroinflammation and markers of cognitive function in the hippocampus of mice fed a WD (corrected)