

## RETRACTION

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# Retraction: Metabolomics reveals that PPAR $\alpha$ activation protects against lithocholic acid-induced liver injury

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Retraction of 'Metabolomics reveals that PPAR $\alpha$  activation protects against lithocholic acid-induced liver injury' by Qi Zhao *et al.*, *RSC Adv.*, 2017, 7, 49849–49857, <https://doi.org/10.1039/C7RA08823J>.

The Royal Society of Chemistry, with the agreement of the named authors, hereby wholly retracts this *RSC Advances* article due to concerns with the reliability of the data in the published article. The authors confirmed that the western blot images in Fig. S3A had been inappropriately manipulated. Given the significance of the concerns about the validity of the data, the findings presented in this paper are no longer reliable.

Fang Liu, Jing Wang and Xiu-Wei Yang were contacted but did not respond.

Signed: Qi Zhao, Rui Yang, Dan-Dan Hu and Fei Li

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Retraction endorsed by Laura Fisher, Executive Editor, *RSC Advances*

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