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Retraction Notice to: SIRT1 Suppresses β -Amyloid Production by Activating the α -Secretase Gene ADAM10

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Donmez et al. (2010) reported that SIRT1 suppressed Alzheimer's disease in a mouse model by upregulating the ADAM 10 a-secretase gene via coactivation of the retinoic acid receptor, RAR β . Increased α -secretase bypassed the processing of APP by the β -secretase, thereby reducing the amyloid burden. It has come to our attention that several figures in the paper contain images in which gel lanes were spliced together without appropriate indication. There are also instances of image duplication. We believe that these errors do not affect the conclusions of experiments in the paper. Moreover, the finding that SIRT1 upregulates the ADAM 10 a-secretase in neurons was reported by Theendakara et al. (Theendakara, V., et al. [2013]. Proc. Natl. Acad. Sci. USA 110, 18303-18308), and the more detailed finding that SIRT1 and RAR^β cooperate in neurons to activate ADAM 10 has also recently been reported by Lee et al. (Lee, H.R., et al. [2014]. J. Neurosci. Res. Published online June 5, 2014. http://dx.doi.org/10.1002/jnr23421), thereby supporting our main conclusions. However, the level of care in figure preparation in Donmez et al. falls well below the standard that we expect, and we are therefore retracting the paper. We offer our sincerest apologies to the scientific community for these errors and for any inconvenience they may have caused.

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