## **ERRATUM**

## **Erratum to: The Role of Autophagy Dysregulation** in Manganese-Induced Dopaminergic Neurodegeneration

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There are two errors in Fig. 2c and Fig. 6e. The correct version of Fig. 2c and Fig. 6e are given in this erratum.

The online version of the original article can be found under doi:10.1007/s12640-013-9392-5.

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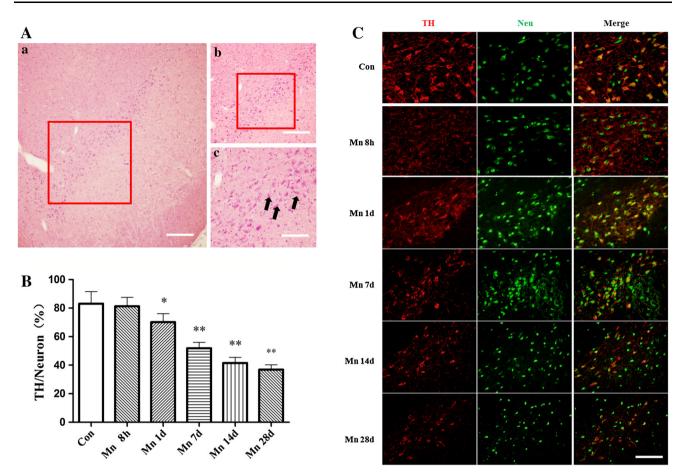
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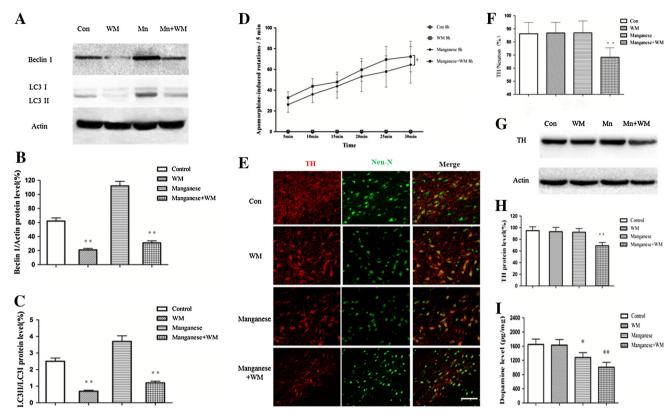




**Fig. 2** The effect of manganese on DAergic neurons in immunofluorescence. 8 h, 1, 7, 14, and 28 days after manganese administration, immunofluorescence was conducted to measure TH-immunoreactivity and TH expression. **A** Location of substantia nigra pars compacta (SNpc). **a** *Scale bar* indicates 1,000 μm. **b** *Scale bar* indicates

500  $\mu$ m. **c** *Scale bar* indicates 200  $\mu$ m. **B** Quantitative analysis of the effect of manganese on DAergic neurons in the ratio of total neurons. \*p < 0.05, \*\*p < 0.01 compared with control groups. **C** The effect of manganese on TH-immunoreactivity. *Scale bar* indicates 200  $\mu$ m





**Fig. 6** The inhibition of autophagy promotes the short-term effect of Mn on nigral DAergic neurons and apomorphine-induced rotations. After the pretreatment of wortmannin in Mn-exposed rats, immunofluorescence and western blotting were conducted to measure TH-immunoreactivity and the expression of TH protein, and the apomorphine-induced rotations were also observed to measure manganese-induced Daergic neurotoxicity. **a** Effect of wortmannin on autophagy. **b**, **c** Densitometry analysis of Beclin 1 protein levels and LC3 II levels relative to LC3 I (mean  $\pm$  SD; one-way ANOVA with Newman–Keuls post hoc analysis, \*p < 0.05 and \*\*p < 0.01). **d** Quantitative analysis of the effect of autophagy inhibition before Mn exposure on the apomorphine-induced rotations. **e** Effect of

autophagy inhibition on manganese-induced TH-immunoreactivity change. **f** Quantitative analysis of the effect of autophagy inhibition on manganese-induced loss of DAergic neurons. \*p < 0.05, \*\*p < 0.01 compared with control groups, \*scale bar\* indicates 200 µm. **g** The inhibition of autophagy by wortmannin promotes the short-term effect of manganese on TH expression. **h** Densitometry analysis of TH levels relative to  $\beta$ -actin was performed after three independent experiments. **i** Effect of autophagy inhibition on manganese-induced dopamine levels change (mean  $\pm$  SD; one-way ANOVA with Newman–Keuls post hoc analysis, \*p < 0.05 and \*\*p < 0.01)

