Translational Neurodegeneration

CORRECTION

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Correction: CD2AP deficiency aggravates Alzheimer's disease phenotypes and pathology through p38 MAPK activation

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Following publication of the original article [1], the authors reported an error in the Fig. 3h, which presented incorrect lane image of p-tau 396. The Fig. 3 is corrected from:

†Yan-Yan Xue and Zhe-Sheng Zhang have contributed equally to this work.

The original article can be found online at https://doi.org/10.1186/s40035-024-00454-5.

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(See figure on next page.)

Fig. 3 Neuronal *Cd2ap* deletion aggravated cognitive function and pathological features in APP/PS1 mice. **a** Scheme of the experimental mouse timeline. Briefly, a series of behavioral tests were performed in 4-month-old mice, and subsequent pathological analyses were conducted in 4.5-month-old mice. **b** No significant difference in time spent in the center area was observed in the open field test. $n = 13$ (WT, female $n = 5$, male $n = 8$), $n = 8$ (APP/PS1, female $n = 3$, male $n = 5$), $n = 10$ (CKO, female $n = 5$, male $n = 5$), $n = 7$ (CKO × APP/PS1, female $n = 4$, male $n = 3$). **c** CKO × APP/PS1 mice spent less time in the novel arm in the Y-maze novel arm preference test compared to WT mice. $n = 13$ (WT, female $n = 5$, male $n = 8$), $n = 8$ (APP/PS1, female $n = 3$, male $n = 5$), $n = 10$ (CKO, female $n = 5$, male $n = 5$), $n = 7$ (CKO × APP/PS1, female $n = 4$, male $n = 3$). **d, e** CKO × APP/PS1 mice showed significantly decreased contextual and cue-related freezing compared to WT mice. $n = 13$ (WT, female $n = 5$, male $n = 8$), $n = 8$ (APP/PS1, female $n = 3$, male $n = 5$), $n = 9$ (CKO, female $n = 5$, male $n = 4$), $n = 7$ (CKO × APP/PS1, female $n = 4$, male $n = 3$). **f** ELISA analysis of Aβ showed that neuronal *Cd2ap* deletion had no obvious influence on human Aβ level. $n = 3$ (APP/PS1, female $n = 1$, male $n = 2$), $n = 5$ (CKO × APP/PS1, female $n = 3$, male $n = 2$). **g** ELISA analysis of Aβ showed that neuronal *Cd2ap* deletion had no obvious influence on murine Aβ level. $n = 6$ (WT, female $n = 2$, male $n = 4$), $n = 6$ (APP/PS1, female $n = 3$, male $n = 3$), $n = 4$ (CKO, female $n = 3$, male $n = 1$), $n = 6$ (CKO × APP/PS1, female $n = 4$, male $n = 2$). **h-j** In 4.5-month-old mice, Immunoblots revealed that neuronal *Cd2ap* deletion had no obvious influence on the full-length APP (APP-FL) and APP-CTF proteins. $n = 6$ (WT, female $n = 3$, male $n = 3$), $n = 6$ (APP/PS1, female $n = 3$, male $n = 3$), $n = 6$ (CKO, female $n = 3$, male $n = 3$), $n = 6$ (CKO × APP/PS1, female $n = 3$, male $n = 3$). **k, l** In 4.5-month-old mice, Immunoblots revealed that neuronal *Cd2ap* deletion led to significantly increased ptau202/205 (AT8) and p-tau396 level, especially in the CKO × APP/PS1 mice. $n = 7$ (WT, female $n = 3$, male $n = 4$), $n = 7$ (APP/PS1, female $n = 3$, male $n = 4$), $n = 7$ (CKO, female $n = 4$, male $n = 3$), $n = 7$ (CKO × APP/PS1, female $n = 4$, male $n = 3$). All data are presented as mean ± SEM. Unpaired *t*-test with two-tailed analysis (**f**), one-way ANOVA with Turkey's multiple comparison tests for multiple comparisons (**b-e, g, i, j, k)**, Kruskal–Wallis tests with Dunn's multiple comparison tests (**l**). $^{*}P < 0.05$, $^{**}P < 0.01$, $^{***}P < 0.001$, $^{****}P < 0.0001$

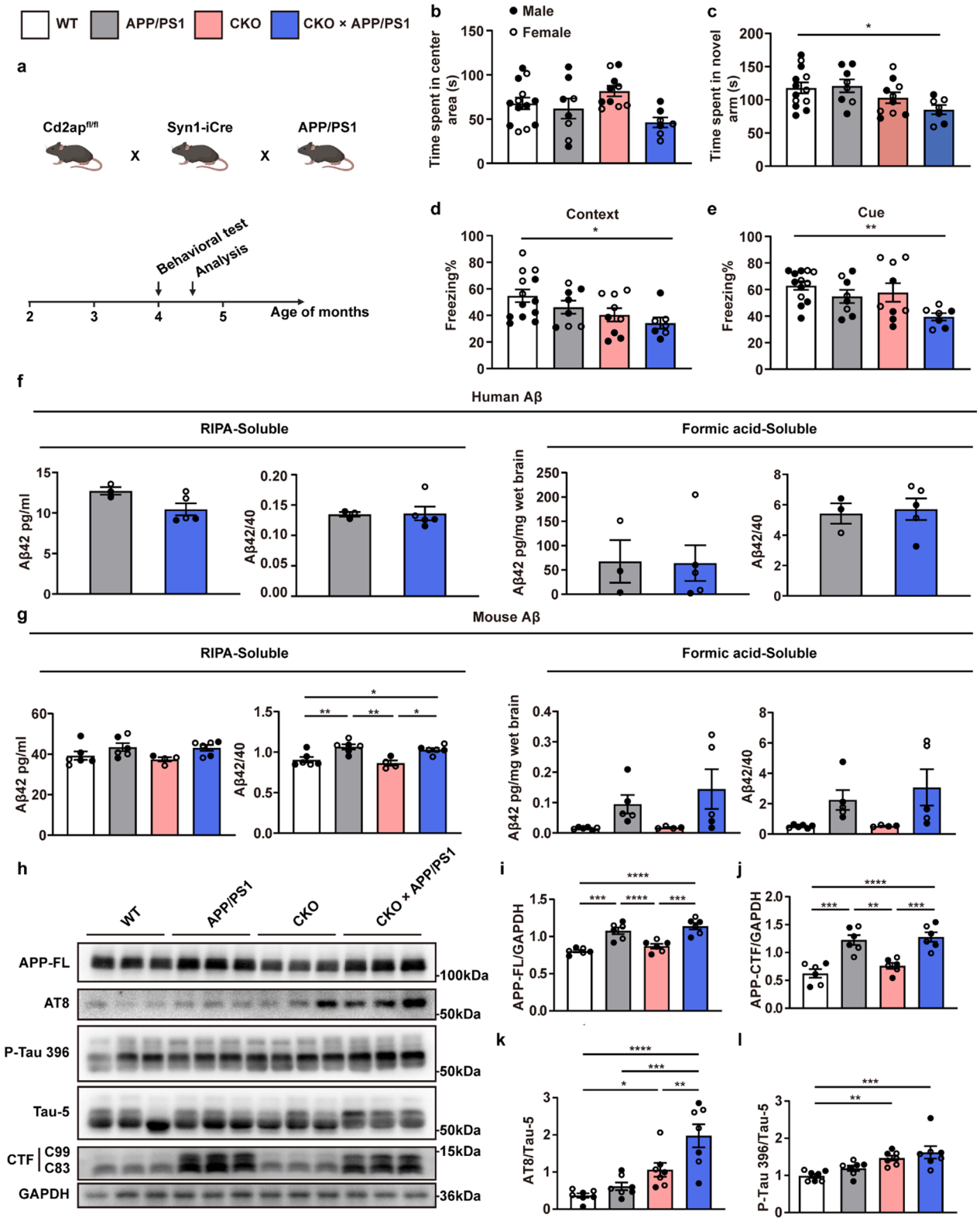

Fig. 3 (See legend on previous page.)

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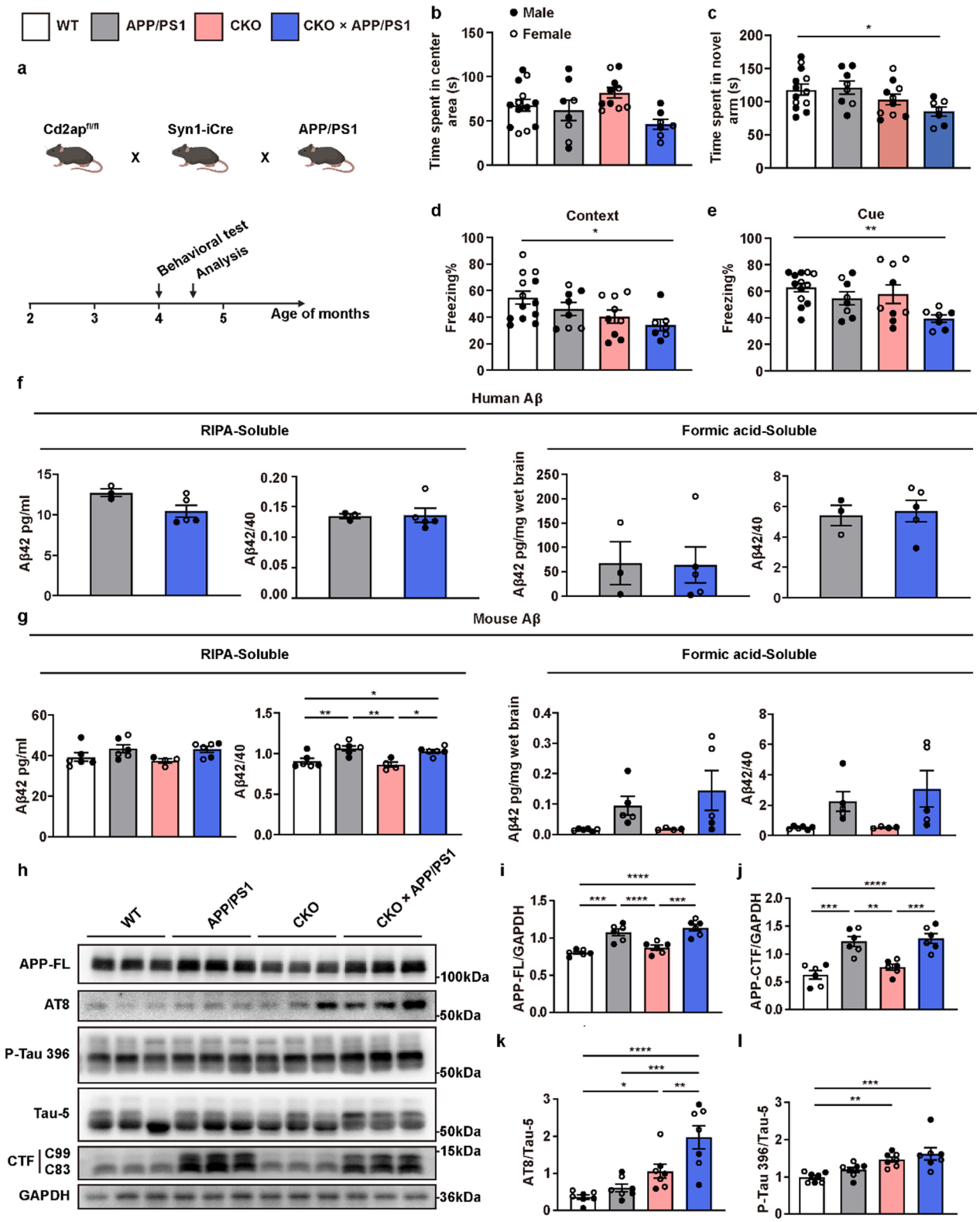

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This correction does not affect the description of the results or the conclusion of this work.
The original article [1] has been updated.

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Reference

1. Xue YY, Zhang ZS, Lin RR, et al. CD2AP deficiency aggravates Alzheimer's disease phenotypes and pathology through p38 MAPK activation. Transl Neurodegener. 2024;13:64. https://doi.org/10.1186/s40035-024-00454-5.