Correction

NEUROSCIENCE

Correction for "Cdk5-dependent phosphorylation of liprinα1 mediates neuronal activity-dependent synapse development," by Huiqian Huang, Xiaochen Lin, Zhuoyi Liang, Teng Zhao, Shengwang Du, Michael M. T. Loy, Kwok-On Lai, Amy K. Y. Fu, and Nancy Y. Ip, which was first published July 31, 2017; 10.1073/pnas.1708240114 (*Proc Natl Acad Sci USA* 114:E6992–E7001).

The authors note that Fig. 3 appeared incorrectly. The corrected figure and its legend appear below.

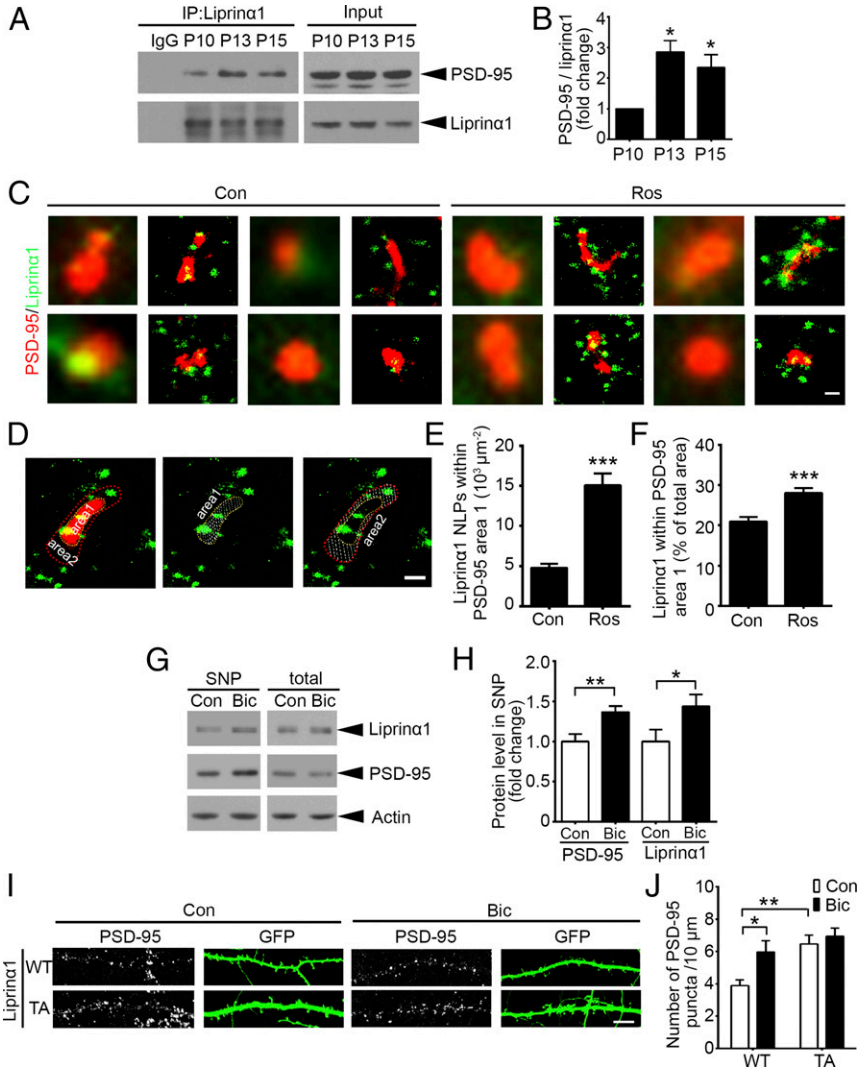

Fig. 3. Reduction of liprinα1 phosphorylation enhances liprinα1–PSD-95 binding and promotes PSD-95 synaptic localization. (*A* and *B*) Coimmunoprecipitation of liprinα1 and PSD-95 in mouse brains at P10–P15. (*A*) Representative Western blot. (*B*) Quantification of PSD-95 bound to liprinα1. PSD-95 normalized to immunoprecipitated liprinα1, $*P < 0.05$ vs. P10, one-way ANOVA with the Student–Newman–Keuls test; $n = 3$ independent experiments. (*C*–*F*) Roscovitine (Ros) treatment increased liprinα1 localization density and percentage within the PSD-95 region. Neurons were treated with DMSO as control (Con) or Ros (25 μM) for 2 h and then stained with liprinα1 and PSD-95 after fixation. (*C*) Individual synapses showing the distribution of liprinα1 (green) surrounding PSD-95 (red) in the Con and Ros groups. (Scale bar: 200 nm.) (*D*) Representative images of the defined PSD-95 region (with yellow outline, area 1) and the surrounding region (red outline, area 2); both regions are indicated by dotted slashes. (Scale bar: 200 nm.) (*E* and *F*) Quantification of the localization points (NLPs) of liprinα1 per square micrometer of area 1, and the percentage of liprinα1 within area 1 vs. the total area (area 1 plus area 2). $***P < 0.001$, Student's *t* test; $n = 53$ and 51 synapses for Con and Ros, respectively. (*G* and *H*) Bicuculline (Bic) treatment (40 μM, 24 h) enriched liprinα1 and PSD-95 in the synaptosome, but did not affect their total levels. (*G*) Representative Western blot. (*H*) Quantification of protein level change of liprinα1 and PSD-95 in the synaptosome. $*P < 0.05$; $**P < 0.01$, Student's *t* test; $n = 5$ independent experiments. (*I* and *J*) Bic treatment or overexpression of liprinα1 TA mutant alone increased PSD-95 puncta density. (*I*) Representative images of PSD-95 puncta distributed along the dendrites of neurons overexpressing WT or TA liprinα1 with or without Bic treatment. (Scale bar: 10 μm.) (*J*) Quantification of PSD-95 puncta density. $*P < 0.05$; $**P < 0.01$ vs. WT Con, one-way ANOVA with the Student–Newman–Keuls test; $n =$ 9, 12, 8, and 9 neurons for WT Con, WT Bic, TA Con, and TA Bic conditions, respectively. All data are mean ± SEM.

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