Title

Targeting oxytocin receptor (Oxtr)-expressing neurons in the lateral septum to restore social novelty in autism spectrum disorder mouse model

Author names

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Legends of supplementary figures

Supplementary figure 1

Investigation time quantified during the sociability test (2nd stage) by using the three-chamber test. Control (Ctrl)+saline, Ctrl+CNO, VPA+CNO: N = 8 per group; VPA+saline: N = 11.

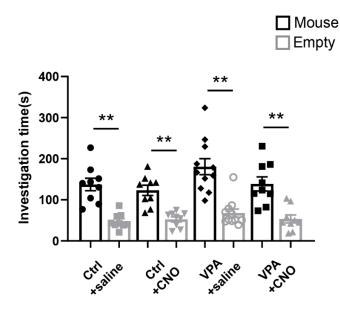
## Supplementary figure 2

- (A) Investigation time quantified during the sociability test (2nd stage) by using the three-chamber test of Oxtr-Cre (Ctrl) and Nl3<sup>R451C</sup> KI: *Oxtr*-Cre (Nl3:Oxtr<sup>Cre</sup>) mice. N=9 per group.
- (B) Investigation time quantified during the sociability test (2nd stage) by using the single-field test. Ctrl+saline: N = 10, Ctrl+CNO: N = 15, Nl3:Oxtr<sup>Cre</sup>+saline: N = 10, Nl3:Oxtr<sup>Cre</sup>+CNO: N = 10.

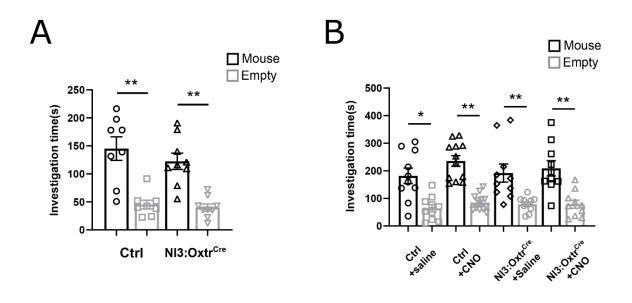
Supplementary figure 3

Expression levels of *Oxtr* (A, D), *Gad1* (B, E), and *Gad2* (C, F) genes by quantitative real-time PCR. The results of VPA-treated *Oxtr*-Cre mice were A, B, and C, and the results of NI3:Oxtr<sup>Cre</sup> mice were D, E, and F. Control mice (Ctrl) were *Oxtr*-Cre. N=6 per group

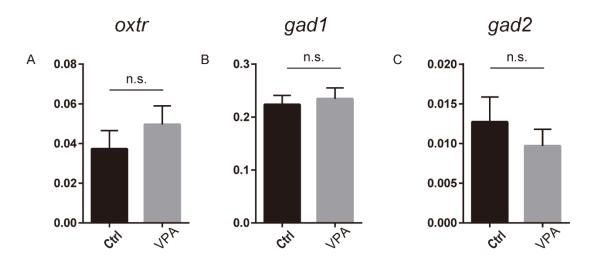
Supplementary figure 1



Supplementary figure 2



## Supplementary figure 3



oxtr



F

gad2

