



Supplementary information, Fig. 8 Expression of D1- and D2-MSN markers in D1^{NAc-VM} and D1^{NAc-VP} neurons.

a, Representative confocal images of eGFP expression (Green), smFISH of the markers (red) and *Drd1* (Blue) in the NAc of C57 mice with the injection of *AAV2/retro-hSyn-eGFP* into the VP or VM. Scale bar: 25 μ m. **b**, Violin plot of D1-MSN and D2-MSN marker expression in transcriptome analysis [Negative binomial generalized linear models, D1^{NAc-VM} n = 120 cells, D1^{NAc-VP} n = 182 cells, see Statistical Table]. *** $p < 0.001$. **c**, Percentage of triple positive cells in the NAc out of *Drd1*⁺ eGFP⁺ cells. [Two-tailed *Student's t*-test, *Tac1*: $t(6) = -5.036$, $p = 0.00237$; *Pdyn*: $t(5) = -3.755$, $p = 0.013$]. * $p < 0.05$, ** $p < 0.01$. Related to Figure 4.