

**Resveratrol modulates cocaine-induced inhibitory synaptic plasticity in VTA  
dopamine neurons by inhibiting phosphodiesterases (PDEs)**

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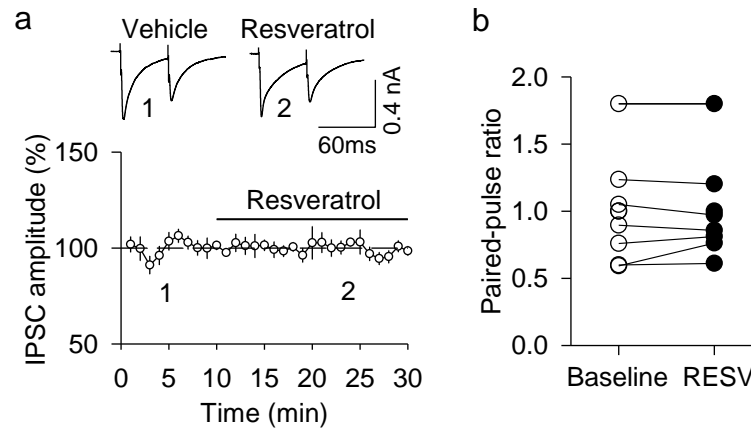
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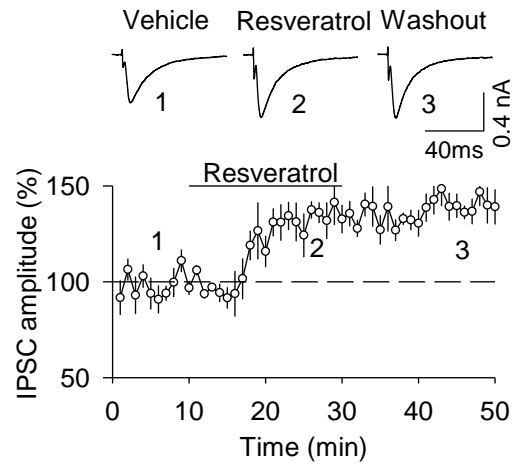
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## Supplementary Materials



**Supplementary Figure S1.** Resveratrol at 10  $\mu\text{M}$  had no significant effect on GABA<sub>A</sub> receptor-IPSCs in VTA dopamine neurons. **a, b.** Bath application of resveratrol (10  $\mu\text{M}$ ) did not alter the amplitude (**a**) and PPR (**b**) of IPSCs ( $p = 0.331$ ,  $n = 6$ ).



**Supplementary Figure S2.** The resveratrol-induced enhancement of IPSCs was not reversed during a 20 min washout period. Resveratrol (100  $\mu$ M) caused an increase in the amplitude of IPSCs ( $p < 0.001$ ,  $n = 7$ ). However, the potentiation was not reversed upon washout of resveratrol for 20 min ( $p = 0.110$  vs. resveratrol application,  $n = 7$ ).