## Supplemental materials

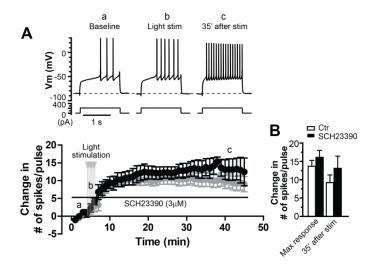


Figure S1. Activation of dopamine D1 receptors is not required for induction of the long-lasting increase in MSN excitability following striatal cholinergic activation. A. Sample traces (*upper*) and average time course of change in number of spike per pulse (*lower*, *black*) before, during and after light stimulation in the presence of  $3 \mu M$  SCH23390 (n = 3), compared with the time course in control (*lower*, *grey*, n = 9). B. Bar graph summarizing the effects of optical activation of striatal cholinergic system on excitability of MSNs in the presence of SCH23390, compared with those in control, presented as maximum change after light stimulation and mean change in number of spike per pulse 35 min after light stimulation (p = 0.37 and p = 0.38, respectively, t-test).