Supplemental Information
Table S1.
(Mizuno et al)

Table S1 Effects of ZD1839 infusion on brain dopamine and metabolites

	Control+Vehicle	Control+ZD1839	EGF+Vehicle	EGF+ZD1839
Frontal Cortex				
DA	100+/-6	134+/-4 **	133+/-14 **	109+/-7 #
HVA	100+/-5	174+/-10 ***	78+/-9 *	142+/-8 ***###
DOPAC	100+/-7	127+/-5 *	122+/-10 *	119+/-7
Striatum				
DA	100+/-10	104+/-11	105+/-11	92+/-9
HVA	100+/-7	113+/-8	106+/-9	69+/-3 **###
DOPAC	100+/-16	96+/-14	105+/-14	94+/-11
Nucleus Accumbens				
DA	100+/-8	103+/-5	102+/-9	94+/-10
HVA	100+/-4	125+/-5	197+/-23 ***	189+/-10 ***
DOPAC	100+/-9	111+/-9	103+/-11	98+/-12
Globus Pallidus				
DA	100+/-8	94+/-8	139+/-7 ***	103+/-8 ##
HVA	100+/-6	75+/-7 **	121+/-6 *	50+/-3 **###
DOPAC	100+/-16	79+/-6	150+/-9 ***	114+/-8 *#
Hippocampus				
DA	100+/-14	103+/-10	156+/-20 *	130+/-14
HVA	100+/-9	123+/-5	160+/-23 **	155+/-12 **
DOPAC	100+/-8	115+/-10	71+/-11 *	90+/-8

ZD1839 (12 μg/day, intraventricular) or vehicle (20% DMSO) was subchronically administered to EGF and control rats for 10-13 days. Monoamines were then extracted from the frontal cortex, striatum, nucleus accumbens, globus pallidus, and hippocampus. Tissue concentrations of dopamine, DOPAC and HVA were measured by HPLC combined with an electrochemical detector and their % ratios to control levels were calculated. *P < 0.05, **P < 0.01, ***P < 0.001, compared with control rats receiving vehicle and #P < 0.05, ##P < 0.01, ###P < 0.001, compared with EGF rats receiving vehicle (by Fisher LSD). Data are expressed as mean ± SEM.

Supplemental Information
Table S2.
(Mizuno et al)

Table S2 Physical effects of intraventricular ZD1839 infusion

Animal groups	Weight Gain (14 days)	Locomotor activity (line crosses / hour)
Control + Vehicle	21.7 ± 3.7	3060 ± 383
Control + ZD1839	22.0 ± 3.3	2860 ± 474
EGF rats + Vehicle	26.4 ± 3.1	4140 ± 525
EGF rats + ZD1839	19.9 ± 1.4	3740 ± 635

The adverse effects of intraventricular infusion of ZD1839 were assessed in control and EGF rats by weight measurements and locomotor activity testing. Body weight gain during ZD1839 infusion was measured over the 14-day period of drug treatment. On the 10th day of the ZD1839 treatment, the total number of beam crossings for horizontal movement of the rats was monitored for 1 h in a novel environment (n = 6-7 mice per group). Data are expressed as mean ± SEM.

Supplemental Information
Figure S1.
(Mizuno et al)

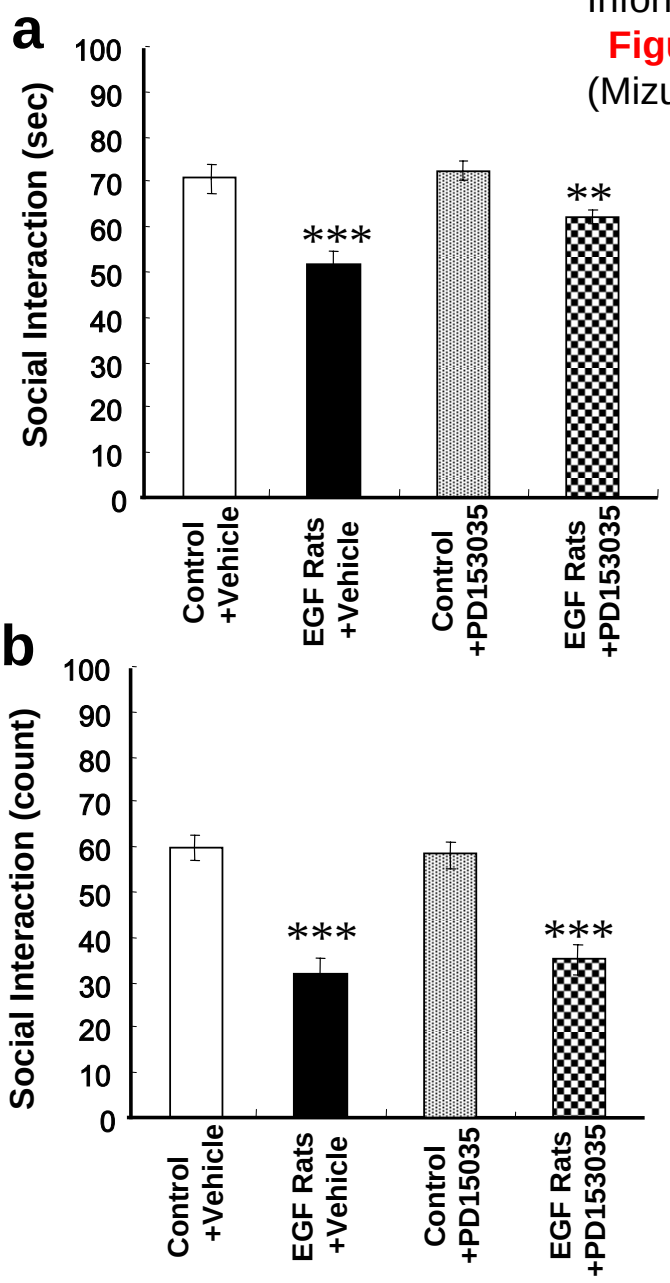

Figure S1. Effects of intraventricular administration of PD153035 on social interaction
EGF or control rats receiving PD153035 (12 μg/day) or vehicle were allowed to interact with an unfamiliar partner rat, which were purchased from the vender and housed in a different cage. We measured the duration and counts of the target rat's sniffing over a period of 10 min. Bars indicate means ± SEM (n = 5 each). **P < 0.01, ***P < 0.01, compared to rats receiving vehicle (0 dose) in each group

Supplemental Information
Figure S2.
(Mizuno et al)

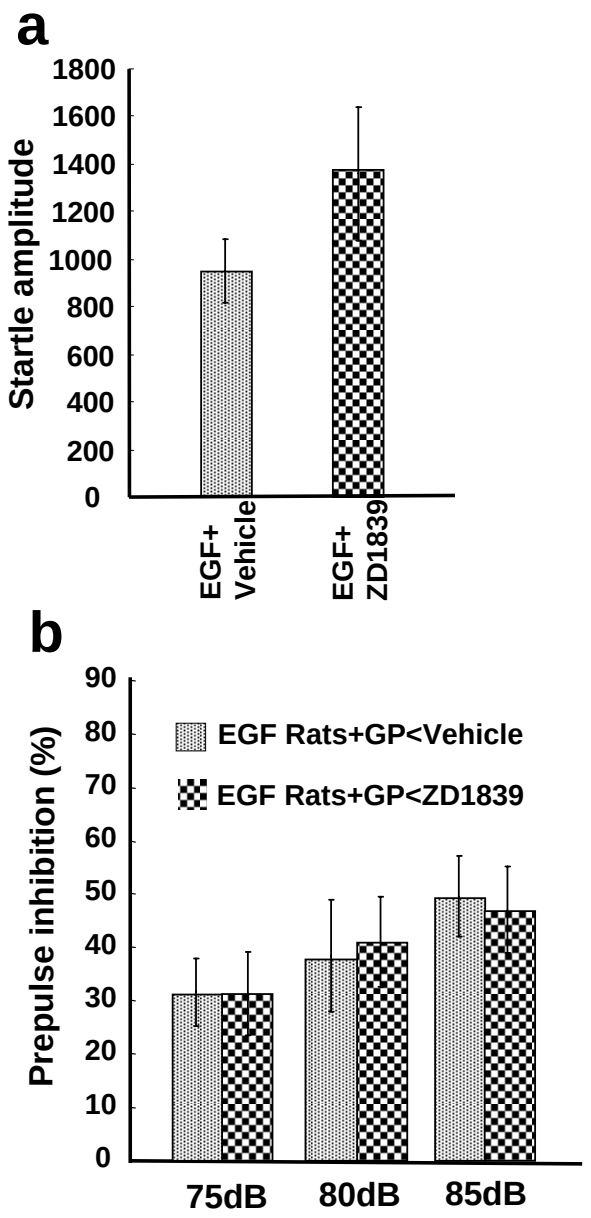

Figure S2. Effects of pallidal infusion of ZD1839 on PPI deficits of EGF model.
ZD1839 (2.4 μg/day) or vehicle was bilaterally administered to globus pallidus of EGF rats for 12 days. Pulse-alone startle to a 120-dB tone was measured and plotted. (B) Prepulse inhibition (PPI) of rats receiving ZD1839 was determined in the presence of 75-, 80- and 85-dB prepulse stimuli. Bars indicate means ± SEM (n = 8 each). No significant effects of ZD1839 was observed; Repeated ANOVA $F(1,14)=0.001$, $P = 0.97$