

Table S1. The influence of different concentrations of ropinirole hydrochloride on stickleback behavior. Pilot study results. Average values for the measured behaviors: Latency to move NA (latency to move in a novel area), number of square changes in a novel area, time in the upper middle zone of a novel area, latency to swim during the mirror test, number of times the fish approached the mirror, and time spent close to a mirror. N = 17.

Dose (ng/l)	Latency to move NA (sec)	number sq changes	time in upper mid (min:sec)	lat to move mirror (sec)	time close (min:sec)	num bouts mirror
0	8.3	66.0	2:02	20.0	2:26	12.3
40	1.2	41.8	1:45	11.0	2:18	5.2
2500	6.0	9.5	6:17	5.0	2:22	1.0
50000	4.4	11.7	5:29	3.0	1:37	1.6
150000	0.0	17.8	0:11	5.5	0:44	4.3

Table S2. Primers used to measure brain gene expression of stickleback. Gene name on Ensembl, Ensembl gene ID, forward and reverse primer sequence, amplicon length and thermocycling temperature in Celsius. From Aubin-Horth et al., 2012; Di Poi et al., 2016; Hibbeler et al., 2008 or designed using sequences from the Ensembl Genome Browser for *Gasterosteus aculeatus*.

Gene name	Ensembl gene ID	Forward primer sequence	Reverse primer sequence	Amplicon length (bp)	Temp (°C)
DRD1b	ENSGACG00000020716	GACGTGTTTGTGTGGTTCCG	GATTCGATGGCGTTGCTCC	138	60
GR1 (nr3c1)	ENSGACG00000018209		Aubin-Horth et al. 2012		
MR (nr3c2)	ENSGACG00000017193		Aubin-Horth et al. 2012		
htr2a	ENSGACG00000008088		Di Poi et al. 2014		
htr2b	ENSGACG00000009251		Di Poi et al. 2014		
DRD2	ENSGACG00000009131		Di Poi et al. 2014		
adrb2a	ENSGACG00000018455		Di Poi et al. 2014		
UBC	NA		Hibbeler et al. 2008		
RPL13a	NA		Hibbeler et al. 2008		