Supplementary table 1. Schedule of IntelliCage analysis

Session name	Days
Free adaptation	2
Nose poke adaptation	3
Drinking session adaptation	3
Place preference test	7
Place preference reversal test	5
Impulsivity test	4
Attention test	5
Place avoidance test	9
Delay discounting test	10

Supplementary table 2. Primer sets in this study.

A. Primer sets for sgRNA (5'->3')

	top	bottom
Macf1	CACCGGTAGGTCTCGTGTCCTGCAA	AAACTTGCAGGACACGAGACCTACC
Ehd1	CACCGGGACTTCACCATCTCCTTCT	AAACAGAAGGAGATGGTGAAGTCC

B. ssODN for knock-in of mutations (5'->3')

Macf1	TGATGCCACTGACAGATAAATCACTCTGAGAAGCAGGCATTATGGGAGCCTTGCAGGACGACGAGACCTACATGGGTAGGCTCTGTGTGAATAGGGTCTCCTGACTGTTTTGGTATTGAT
Ehd1	TTCTACACACTGTCTCCTGTCAACGGCAAGATCACAGGTGCTAATGCTAAGAAGGAGATGTGAAGTCCAAGCTGCCCAACACAGTGCTGGGGAAGATCTGGAAGTTGGCAGATGTGGACA

C. Genotyping primers

	Fw	Rv	PCR conditions
Macf1	CAGGTAAAGGAGAGCTTCCAAGCAG	CACACTCCACTTCGATATGCCTGAG	94℃, 1 min → (98℃, 10 sec → 68℃ , 1 min）×30
Ehd1	CAGACCCAGGACTTCAGCAAGTTCC	GGATGAGTGTGGGGCTGTCAGACAG	

D. Sequencing primers for genotyping

	5'->3'
Macf1	CCTCTGAAACAGTAGATCAAGACCAACC
Ehd1	CCTCCGTTTGGAGGGTGGAATGAG