

Supplemental Data

In Vivo Regulation of the μ Opioid Receptor: Role of the Endogenous Opioid Agents

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Supplementary Table S1. Primers used for qPCR analysis. Summary of the primers that have been used in qPCR experiments, amplicon length and ENSEMBL Gene ID.

Precursor	ENSEMBL Gene ID	qPCR Primer sequence	Amplicon length
<i>eef1a1l1</i>	ENSDARG00000020850	5' TCAAGAAGATCGGCTACAAC 3' 5' CCTGAACCCAGCCCATGT 3'	105 bp
<i>penk a</i>	ENSDARG00000004869	5' GACAGACAGACATCGACACACTG 3' 5' ATGGTTTGCACCTCTTCATCTT 3'	149 bp
<i>penk b</i>	ENSDARG00000036045	5' GAGGACTGCGCGTACTGTCT 3' 5' GCTCCTCACACTCCAACACA 3'	85 bp
<i>pomc a</i>	ENSDARG00000043135	5' CCGCTGTGCGAGACCTCAG 3' 5' CTGTAAGTTCAGACCTGCATAATTG 3'	110 bp
<i>pomc b</i>	ENSDARG00000069307	5' TGTGTTTTCACAGCCACAT 3' 5' CGATCTGCACTTCTGAGACAC 3'	110 bp
<i>mor</i>	ENSDARG00000039434	5' ACGAGCTGTGCAAGATTGTG 3' 5' CCGATTGCAGATGAAAGGAT 3'	187 bp

Supplementary Table S2. Statistical analysis of the Ki-values obtained in the pharmacological experiments. This table summarizes the statistical significance for the Log (Ki-values, M) that have been assessed from the competition binding assays. Data were analyzed by one-way analysis of variance (ANOVA) followed by Tukey post-hoc test using GraphPad Prism software (San Diego, CA, USA). Legend: ME- Met-Enkephalin, LE - Leu-Enkephalin, β -END - β -endorphin, MEGY - Met-Enkephalin-Gly-Tyr. n.s. - not statistically significant; * - $p < 0.05$; ** - $p < 0.01$; *** - $p < 0.001$.

	LE	β -END	MEGY	(D-Ala ²)-MEGY	(D-Ala ² , Val ⁵)-MEGY	Morphine	Naloxone
ME	n.s.	**	**	n.s.	***	**	***
LE		***	***	n.s.	*	***	***
β -END			n.s.	**	***	n.s.	***
MEGY				**	***	n.s.	***
(D-Ala ²)-MEGY					***	**	***
(D-Ala ² , Val ⁵)-MEGY						***	***
Morphine							***