Supplemental Table 1.
Gas chromatography (GC) /mass spectrometry (MS) parameters used for steroid identification and quantification in single ion monitoring mode

Steroids (MW)	**Derivatized steroids** (MW)	**GC: retention time (min.)**	**MS: diagnostic ions (m/z)**
Progesterone (314)	Progesterone-3-HFB (510)	17.47	495 and **510**
5α-DHP (316)	5α-DHP-3,20-TMS_2 (460)	19.87	**445** and 460
Allopregnanolone (318)	Allopregnanolone-3-HFB (514)	16.47	496 and **514**
Corticosterone (346)	Corticosterone-3,21-HFB_2 - H_2O (720)	19.68	**705** and 720
	Internal standards		
19 norprogesterone (300)	19 nor-progesterone-3-HFB (496)	17.28	481 and **496**
$^2H_6$-5α-DHP (322)	$^2H_6$-5α-DHP-3,20-TMS_2 (466)	19.80	**448-451** and 466
$^2H_8$-corticosterone (354)	$^2H_8$-Corticosterone-3,21-HFB_2 - H_2O (728)	19.58	**709-713** and 728

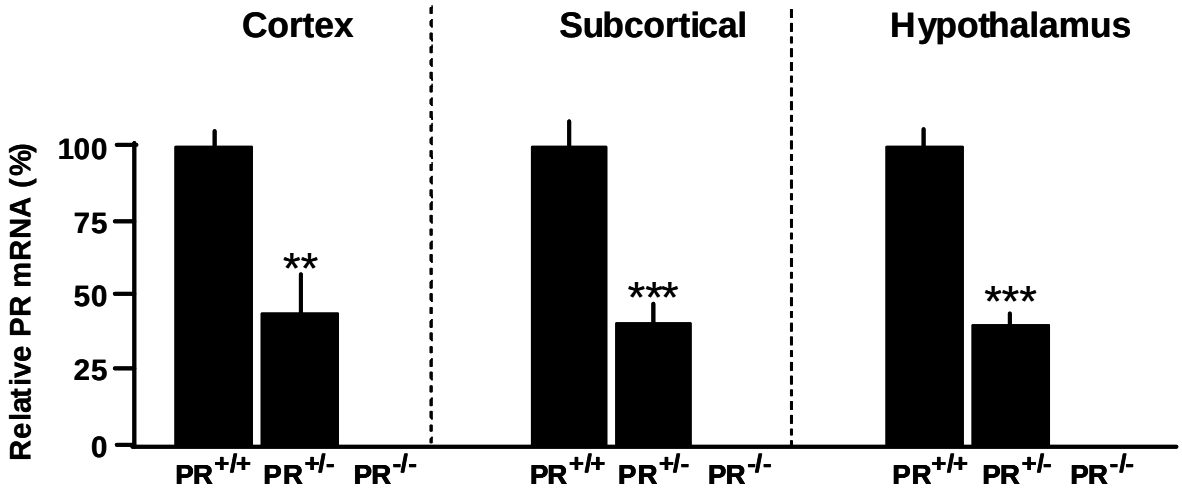
Two diagnostic ions were used for identification and the one in bold was used for quantification.

(MW: molecular weight, 5α-DHP: 5α-dihydroprogesterone, HFB: heptafluorobutyrate derivative, TMS: trimethylsilyl derivative).

Supplemental Table 2. Quantitative polymerase chain reaction (qPCR).

mRNA	Primer sequences 5' to 3'	Ex	*r*
PR	PR F: CCGGAGAAGGACAGCAGACT PR R: GGGCTGGCGTGACTCTGTT	**93.68 ± 1.73**	**0.997± 0.003**
Cyc b	Cyc F: GTGGCAAGATCGAAGTGGAGAAAC Cyc R: TAAAAATCAGGCCTGTGGAAT GTG	**92.08 ± 2.11**	**0.997 ± 0.01**

Correlation coefficients (r) confirm the linear relationship between the threshold cycle and the logarithm of the cDNA concentration. The PCR efficiency (Ex) was calculated using the equation Ex = $(10^{-1/slope}) - 1 \times 100$. Similar amplification efficiency rates between target and reference genes were obtained (Ex close to 1). The r and Ex values showed that PCR conditions have been properly optimized (PR = progesterone receptor; Cyc b = cyclophilin b; F = Forward; R = reverse).



Supplemental Figure 1. Analysis of PR mRNA expression in brains of $PR^{+/+}$, $PR^{+/-}$ and $PR^{-/-}$ mice by qPCR. When compared to $PR^{+/+}$ male mice (= 100%), PR mRNA expression is reduced by about 60% in cerebral cortex, subcortical regions and hypothalamus of $PR^{+/-}$ mice, and is not detected in $PR^{-/-}$ mice (means ± s.e.m., n=4 per group). Comparisons between $PR^{+/+}$ and $PR^{+/-}$ were performed by unpaired Student's t-test for each brain region (***$P < 0.001$, **$P < 0.01$).