1 Supplemental Figure Legends

Suppl. Fig. 1. Tissue distribution of riGnRHRs. Total RNAs from various tissues were subjected to
RT-PCR analysis. For the negative control, cDNA was replaced by distilled water. M, 100-bp DNA
size markers; Ad, adrenal gland; CB, cerebellum; CTL, control; DL, distal lobe of the pituitary;
GAPDH, glyceraldehyde 3-phosphate dehydrogenase; HYP, hypothalamus; I/NP, neurointermediate
lobe of the pituitary; Kd, kidney; Liv, liver; Lu, lung; MC, mesencephalon; OL, olfactory lobe; TC,
telencephalon; RC, rhombencephalon; SC, spinal cord; Tes, testis.

Suppl. Fig. 2. Labeling of consecutive frontal sections through the anterior preoptic area (Poa)
illustrating the specificity control of the GnRH1 immunoreaction. A-C: Adjacent sections were
incubated with the GnRH1 antibody (A) or with the antiserum preincubated with 10⁻⁵ M synthetic
GnRH1 (B) or 10⁻⁵ M GnRH2 (C). X300. III, third ventricle.

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SUPPLEMENTAL TABLE 1.

Sequence of the specific primers used for the amplification of the cDNAs encoding GnRHR in *Pelophylax ridibundus* and for the RT-PCR.

| Sequence of the specific primers used for the amplification of the cDNAs encoding GnRHR in | | | | | | |
|--|--|--|--|--|--|--|
| Pelophylax ridibundus | | | | | | |
| FR-1F | (5'-CGC <u>GAATTC</u> GCCACCATGAATATCTCAAAGGAAGTTAGCAT-3') | | | | | |
| FR-1R | (5'-CGCC <u>TCTAGA</u> TTCATATTATACACATCTGTAATTGACT-3') | | | | | |
| FR-2F | (5'-CGC <u>GAATTC</u> GCCACCATGCAGCCAGCGATCGTAAATCGAAG-3') | | | | | |
| FR-2R | (5'-CGCC <u>TCTAGA</u> TTCAAAAGACAGACTGTACTGTGGTGGCC-3') | | | | | |
| FR-3F | (5'-CGC <u>GAATTC</u> GCCACCATGAACGCTAGTGACCAACCTATGG-3') | | | | | |
| FR-3R | (5'-CGCC <u>TCTAGA</u> TTCACATAAAGCTCTCTACGATTTGAC-3') | | | | | |
| Sequence of the specific primers used for the RT-PCR | | | | | | |
| 3'-GSP (I) | 5'-CCAAGCGCATGAGCAAAGGAACACTTTC-3' and FR-1R | | | | | |
| 3'-NGSP (II) | 5'-GCACCCTATTTGTCACTCCGCTAGGCGTCA-3' and FR-2R | | | | | |
| 3'-GSP (III) | 5'-TGTTTGTGTTCCACACGGTGAGCCGGTC-3' and FR-3R | | | | | |

The FR-1F, FR-2F and FR-3F primers incorporate an *Eco*RI restriction enzyme site (*underlined*) and a Kozak translation initiation site (*italics*). The FR-1R, FR-2R and FR-3R primers incorporate an *Xba*I site (*underlined*).

SUPPLEMENTAL TABLE 2.

| | | GnRH1 | | GnRH2 | |
|-------|-----------|----------------------|------------------|----------------------|------------------|
| | | Log EC ₅₀ | E _{max} | Log EC ₅₀ | E _{max} |
| c-fos | riGnRHR-1 | -6.99 ± 0.10 | 14.4 ± 0.55 | -8.13 ± 0.08 | 13.0 ± 0.30 |
| | riGnRHR-2 | -6.61 ± 0.05 | 58.0 ± 1.32 | -9.26 ± 0.21 | 69.6 ± 3.59 |
| | riGnRHR-3 | -6.24 ± 0.03 | 42.5 ± 0.73 | -8.11 ± 0.08 | 40.1 ± 0.97 |
| CRE | riGnRHR-1 | -7.39 ± 0.13 | 4.33 ± 0.18 | -7.55 ± 0.09 | 7.04 ± 0.23 |
| | riGnRHR-2 | -6.74 ± 0.08 | 46.4 ± 1.47 | -9.63 ± 0.08 | 53.8 ± 1.06 |
| | riGnRHR-3 | -6.68 ± 0.15 | 16.6 ± 1.03 | -8.28 ± 0.16 | 16.8 ± 0.68 |

Log EC_{50} and E_{max} values of riGnRHRs for GnRH1 and GnRH2

CV-1 cells were cotransfected with individual riGnRHR together with the CRE- or c-fos-luc reporter. Luciferase activity was determined after GnRH stimulation for 6 h. Data are the mean \pm SEM of three independent experiments. Log EC₅₀ and E_{max} values were obtained from the dose-response curves of each receptor for ligand using the PRISM2 program.



Supplemental Figure 1 Burel et al. 2013



Supplemental Figure 2 Burel et al. 2013