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**Cloning of the cDNA encoding 17 α -hydroxylase/
17,20-lyase in *Rana dybowskii***

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Frog has an annual reproductive cycles in their follicular oocyte development and follicular steroidogenesis. In fully grown oocytes, the follicles produce mainly testosterone but they produce only progesterone when breeding season approached. This phenomenon is caused by the decrease in the 17 α -hydroxylase/17,20-lyase(P450_{17 α}) activity which metabolize the progesterone to 17 α -hydroxyprogesterone and finally to androstenedione. We designed the primers which match to the P450_{17 α} conserved amino acid sequence. Partial sequence of P450_{17 α} was amplified by RT-PCR in testis and then PCR product was cloned into pBluescript SK(+). The insert size was 213bp. Deduced amino acid sequence of PCR clone was identical in conserved region of P450_{17 α} . The deduced amino acid sequence identity compared with other animal was 76, 72, 63% in chick, rainbow trout and guinea pig, respectively. This is the first report demonstrating the partial cloning of cDNA encoding P450_{17 α} in amphibians. (HRC-96-0402)

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**Cloning and sequencing of cDNA encoding
GnRH in *Rana dybowskii***

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Gonadotropin releasing hormone (GnRH) plays an important role in the reproduction of vertebrates. Since the GnRH gene of *Rana* has not been cloned, we tried to clone and sequence GnRH using *Rana dybowskii*. RT-PCR from forebrain region showed the presence of GnRH transcript of 184bp. Similar result was obtained from the RNA sample from testis but not from muscle. Northern blot analysis of the total RNA sample from brain and testis indicated the presence of GnRH mRNA in these tissues. Deduced amino acid sequence analysis showed that PCR product matched with the sequence of the conserved region in *Xenopus* and mammalian GnRH. The conserved ten amino acid region of GnRH was perfectly matched each other but the sequence of other region was similar to that of *Xenopus* GnRHII. This is the first report demonstrating the partial cloning of GnRH from *Rana* (HRC-96-0202).