

## 中华大蟾蜍卵母细胞发育过程中乳酸脱氢酶同工酶表现

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**摘要** 采用聚丙烯酰胺凝胶盘状电泳研究了中华大蟾蜍卵母细胞不同发育时期的乳酸脱氢酶(LDH)同工酶。发现在蟾蜍卵母细胞的不同时期存在有四种类型的酶谱。分析了这四种类型酶谱出现频率与卵母细胞发育时期的关系,发现在卵母细胞形态变化最显著的时期,卵的LDH特征酶谱类型也有显著的变化。

**关键词**

**分类号**

## Expression of Lactate Dehydrogenase Isozyme During Oocyte Development in the Toad (*Bufo bufo gargarizans*)

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### Abstract

The LDH isoenzymes during different periods of oocyte development in the toad (*Bufo bufo gargarizans*) were studied by disc gel electrophoresis. Four zymogram patterns were found: (i) The cathode pattern (Ab) with dominant A gene activity, (ii) the anode pattern (aB) with dominant B gene activity, (iii) the intermediate pattern (AB) with equal gene activities between a and B, expressing itself in having two slightly coloured zones of the anode B4 (LDH-1) and of the cathode A4 (LDH-5) and three deeply coloured intermediate zones, (iv) the pattern with higher gene activities of both A and B, expressing itself in having darker colour than all the five LDH zones, their optical density values being approximately the same (A+B+).

After analyzing the relation between the frequencies of zymogram of the four different patterns appearing and the different periods of oocyte development, it was discovered that when the changes of morphology in the oocyte were most remarkable, the LDH characteristic zymogram pattern would also change markedly, i.e. in the course of development from the small white oocyte, 0.2mm in diameter, up to the large grey oocyte, about 1 mm in diameter, the LDH zymograms were accompanied with pattern changes from Ab-A+B+-AB and aB.

### Key words

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