

生命科学

## 盘基网柄菌野生型KAX-3和突变型AK127细胞mRNA差异显示分析

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**摘要** 为研究gp150蛋白调控盘基网柄菌发育相关基因的功能, 用mRNA差异显示技术比较分析盘基网柄菌发育14 h的KAX-3细胞和AK127细胞. 结果显示两种类型细胞基因表达有明显差异, 突变细胞不能表达275 bp片段. 对其测序分析后发现差异片断与编码组氨酸激酶、STATc蛋白及同源框蛋白等的基因中的一段序列有很高的相似性. 推测gp150蛋白的缺失引起某些调控因子表达异常, 从而使突变细胞的基因表达不正常, 最终导致细胞不能完成多细胞发育.

**关键词** [盘基网柄菌](#); [gp150蛋白](#); [mRNA差异显示](#)

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## Differential expression analysis of the wild cells KAX-3 and the mutant cells AK127 in Dictyostelium discoideum(Chinese)

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### Abstract

To study the influence of gp150 protein on the gene expression during Dictyostelium discoideum development, differential display was used to analyze the differences of gene expression between the wild cells KAX-3 and the mutant cells AK127 (absence of gp150) at 14 h of their development. The results indicated that gene expressions are obviously different between the two type cells. The 275 bp fragments which did not express in the mutant cells showed partial sequence similar to the gene encoding histidine kinase, STATc protein and homeobox protein. The data suggest that mutant cells cannot complete development because gp150 is responsible for the mediation of the gene expression of some regulatory factor

**Key words** [Dictyostelium discoideum](#); [gp150 protein](#); [mRNA differential display](#)

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