

蓖麻蚕核型多角体病毒多角体蛋白基因的克隆和核苷酸序列分析¹⁾

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摘要 蓖麻蚕(*Attacus ricini*) 是我国特有蚕种, 以其核多角体病毒(ArNPV) 为载体有可能发 展成为新的基因工程表达系统, 我们建立了ArNPV基因库, 并亚克隆了含多角体蛋白(Ph)基 因DNA片段。对该1.1kb全长DNA片段进行序列分析, 确定ArNPV Ph结构基因全长735bp, 与苜 蓿尺蠖NPV(AcNPV)、家蚕NPV(BmNPV) 同源性分别为76%和81%, ArNPV5' 端调控结构 Rohrman n box 与各类NPV的ph基因相似, 但3' 下游序列几无同源, 显示了ArNPV ph基因结构的特征 性。同时, 我们还对ph基因启动子的其它结构特点作了剖析。

关键词 [蓖麻蚕核型多角体病毒,核多角体蛋白基因,核苷酸序列](#)

分类号

Cloning and Sequencing of *Attacus Ricini* Nuclear Polyhedrosis Virus Polyhedrin Gene

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Abstract

Amacus ricini is a species of insect which only grows in China. It is expect ed to construct a new expression system for genetic engineering by using ArNPV as a vector. We have established an ArNPV gene library. The 1.1 kb DNA fragment c ontaining ArNPV Ph gene was subcloned. Sequencing analysis showes that the 735 b p Ph structural gene has the homology of 76% and 81% with those of AcNPV and BmN PV respectively. The Rohrman box in the ArNPV 5'-end regulation region is very similar to those of various other NPVs, but the 3'-end downstream sequence has almost no homology with those of AcNPV and BmNPV, demonstrating the characteristi c property of the structure of ArNPV Ph gene. Other structural features of the Ph gene promoter are also discussed in this paper.

Key words [Attacus ricini unclear polyhedrosis virus](#) [Polyhedrin gene](#) [Nucleotide sequence](#)

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