

植物的MAR及其对转基因表达的效应 MARs in Plants and Their Effects on the Transgene Expression

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摘要 与核基质结合的DNA序列称为基质附着区 (matrix attachment regions, MARs), 可提高转基因的表达水平并降低转基因在不同转基因系间的表达差异, 因其在植物基因工程中的巨大应用潜力而引起了研究者的极大兴趣。对植物中MAR的研究尚处于早期阶段, 本文综述了植物中MAR的分离鉴定、序列特征及MAR对植物中转基因表达的影响, 并进一步讨论了MAR对转基因效应的可能机制。

Abstract: DNA sequences called matrix attachment regions (MARs) have recently attracted much attention because of their perceived capacity to increase levels of transgene expression and to reduce transformant-to-transformant variation of transgene expression in plants. Work with MARs in plants is in its early stage. In the present paper, we reviewed the procedure to isolate and identify MAR sequences from higher plants, the sequence characteristics of the plant MARs and the effect of MARs on the transgene expression in plants. Furthermore, the possible mechanism to explain how MARs affect transgene expression in transformants was discussed.

关键词 [植物](#) [基质附着区](#) [转基因表达](#) **Keywords** [plant](#) [matrix attachment regions \(MARs\)](#) [transgene expression](#)

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