

Molecular Cloning and Characterization of Citrate Synthase Gene in Rice (*Oryza sativa*)

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摘要: The full-length OsCS encoding citrate synthase was isolated from rice (*Oryza sativa* L. subsp. japonica). OsCS is 1477-bp long and encodes a 474 amino acid polypeptide. Its putative protein sequence is highly identical to *Daucus carota*, *Nicotiana tabacum*, *Beta vulgaris* subsp., *Arabidopsis thaliana*, and *Citrus junos* (>70%). The deduced amino-terminal sequence of OsCS shows characteristics of mitochondrial targeting signal. Southern blot analysis using ORF of the OsCS as the probe indicated that this gene exists in multiple copies in rice genome. The band with predicated size of 82 kD was detected by Western blot after being induced by 0.4 mmol/L IPTG.

关键词: citrate synthase; rice (*Oryza sativa*); gene; clone

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