

Title Clone ACC oxidase gene to carnation and construction of plant antisense expression vectors
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Abstract

A pair of specific primers was designed according to the cDNA sequence of DC-ACO (*Dianthus Caryophyllus* L. ACC Oxidase) and a partial sequence of the gene were amplified from genomic DNA of carnation cv. 'Master' by PCR. Sequence analysis of the cloned sequence showed that the cloned gene were basically coincident with the gene sequences reported. An antisense expression vector, named pCAM-AC02, of the DC-ACO gene was constructed, in which the antisense sequence can be controlled by the CaMV 35S promoter. This study provides fundamental information for further transgenic research to prolong the flowering period of the transgenic carnation via antisense technology.