## F201

## Cloning of S-adenosylmethionine Decarboxylase Genomic DNA from Carnation

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S-adenosylmethionine decarboxylase (SAMDC) is the key enzyme in the synthesis of spermidine, spermine which have various physiological roles in plant. From genomic southern, we have found that at least two SAMDC DNAs exist in carnation genome. For promoter analysis, we have cloned two SAMDC genomic DNAs from carnation. Two genes are called CSDCG1,2 respectively. As a result of sequencing of CSDCG1, there were three introns, intron 1,2,3 respectively in untranslated region. Intron 1 is longer than the other two but its size was not exactly determined. The size of Intron 2 is 886 bps. Intron 1,2 lie in upstream region from uORF. Intron 3 exist in uORF, its size is 104 bps. As a result of sequencing of CSDCG2, there was at least one intron in untranslated region. CSDCG2 is sequencing. If two genomic DNAs fully sequenced, we expect interesting result of promoter analysis of SAMDC gene.

## F202

cDNA Cloning and Molecular Analysis of Acid-β-fructosidase Expressed in Red Pepper (*Capsicum annuum* L.) Fruits

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A partial cDNA clone of acid- $\beta$ -fructosidase was isolated from the cDNA library of young red pepper (*Capsicum annuum* L.) fruits. The size of the cDNA clone reached 2.1 kb, and it was proposed to be shorter than full-length cDNA by 0.2 kb. The partial cDNA clone proved to be containing two well-conserved base sequences which specifically appeared specifically in acid- $\beta$ -fructosidase of other plant species (*eg.* tomato, arabidopsis *etc.*) and yeasts. Genomic Southern blot analysis showed that the acid- $\beta$ -fructosidase gene of red pepper was not multiple-copy but a single or low-copy gene.