

Structural comparison of poplar CCoAOMT gene with alfalfa CCoAOMT

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Abstract

Caffeoyl CoA 3-O-methyltransferase (CCoAOMT) catalyze identical reactions in phenylpropanoid pathways, concerning in the formation of lignin precursors. Poplar CCoAOMT gene was isolated by RT-PCR with primer designed from the sequence of *Populus balsamifera* CCoAOMT. The amplified CCoAOMT was highly similar (87%) at the amino acid sequence level to alfalfa CCoAOMT. Here, we report the structural comparison of poplar CCoAOMT gene with alfalfa CCoAOMT and homology modeling based on alfalfa 1SUI structure.

Reference

1. Ferrer JL, Zubieta C, Dixon RA, Noel JP. Crystal structures of alfalfa caffeoyl coenzyme A 3-O-methyltransferase. (2005) *Plant Physiol.* 137, 1009-17.