

Title (en)

FOUR-GENE PATHWAY FOR WAX ESTER SYNTHESIS

Title (de)

VIER-GENE-SIGNALWEG FÜR WACHSESTERSYNTHESE

Title (fr)

VOIE À QUATRE GÈNES POUR LA SYNTHÈSE D'ESTER CIREUX

Publication

EP 2820029 A1 20150107 (EN)

Application

EP 12869795 A 20120229

Priority

US 2012027091 W 20120229

Abstract (en)

[origin: WO2013130062A1] The invention relates to methods for producing a wax ester in recombinant host cells engineered to express a thioesterase, an acyl-CoA synthetase, an alcohol-forming fatty acyl reductase, and a wax ester synthase. The methods of the invention may take place in photosynthetic microorganisms, and particularly in cyanobacteria. Isolated nucleotide molecules and vectors expressing the thioesterase, acyl-CoA synthetase, alcohol-forming fatty acyl reductase, and wax ester synthase, recombinant host cells expressing the thioesterase, acyl-CoA synthetase, alcohol-forming fatty acyl reductase, and wax ester synthase, and systems for producing a wax ester via a pathway using these four enzymes, are also provided.

IPC 8 full level

C07H 21/04 (2006.01); **C12N 15/82** (2006.01)

CPC (source: EP)

C12N 15/52 (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2013130062 A1 20130906; EP 2820029 A1 20150107; EP 2820029 A4 20151223

DOCDB simple family (application)

US 2012027091 W 20120229; EP 12869795 A 20120229