

Title (en)

GENETICALLY OPTIMISED MICROORGANISM FOR PRODUCING MOLECULES OF INTEREST

Title (de)

GENETISCH OPTIMIERTER MIKROORGANISMUS ZUR PRODUKTION VON MOLEKÜLEN VON INTERESSE

Title (fr)

MICROORGANISME GÉNÉTIQUEMENT OPTIMISÉ POUR LA PRODUCTION DE MOLÉCULES D'INTÉRÊT

Publication

EP 3574082 A1 20191204 (FR)

Application

EP 18702646 A 20180126

Priority

- FR 1750696 A 20170127
- EP 2018052004 W 20180126

Abstract (en)

[origin: WO2018138288A1] The invention relates to a genetically modified microorganism expressing a functional type I or II RuBisCO enzyme and a functional phosphoribulokinase (PRK), and in which the non-oxidative branch of the pentose phosphate pathway is at least partially inhibited, said microorganism being genetically modified such that it produces an exogenous molecule and/or overproduces an endogenous molecule. The invention further relates to the use of such a genetically modified microorganism for producing or overproducing a molecule of interest, and to methods for the synthesis or bioconversion of molecules of interest.

IPC 8 full level

C12N 1/13 (2006.01); **C12N 1/15** (2006.01); **C12N 1/19** (2006.01); **C12N 1/21** (2006.01); **C12N 9/02** (2006.01); **C12N 9/04** (2006.01); **C12N 9/10** (2006.01); **C12N 9/12** (2006.01); **C12N 9/18** (2006.01); **C12N 9/88** (2006.01); **C12N 15/52** (2006.01)

CPC (source: EP KR US)

C12N 9/1022 (2013.01 - EP KR US); **C12N 9/1205** (2013.01 - EP KR US); **C12N 9/88** (2013.01 - EP KR US); **C12N 15/52** (2013.01 - EP KR US); **C12P 5/026** (2013.01 - US); **C12P 7/625** (2013.01 - US); **C12P 13/14** (2013.01 - US); **C12Y 202/01001** (2013.01 - EP US); **C12Y 202/01002** (2013.01 - EP US); **C12Y 207/01019** (2013.01 - EP US); **C12Y 401/01039** (2013.01 - EP US); **C12Y 202/01001** (2013.01 - KR); **C12Y 202/01002** (2013.01 - KR); **C12Y 207/01019** (2013.01 - KR); **C12Y 401/01039** (2013.01 - KR)

Citation (search report)

See references of WO 2018138288A1

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 2018138288 A1 20180802; BR 112019015411 A2 20200526; CN 110475851 A 20191119; EP 3574082 A1 20191204; FR 3062395 A1 20180803; FR 3062395 B1 20210416; JP 2020506722 A 20200305; KR 20190114982 A 20191010; US 2019359988 A1 20191128

DOCDB simple family (application)

EP 2018052004 W 20180126; BR 112019015411 A 20180126; CN 201880019539 A 20180126; EP 18702646 A 20180126; FR 1750696 A 20170127; JP 2019561348 A 20180126; KR 20197022622 A 20180126; US 201816480579 A 20180126