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Combining metabolic engineering and process optimization to improve production and secretion of fatty acids

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Keywords

Synthetic biology, lipid secretion, microbial oil, biodiesel, Yarrowia lipolytica, oleaginous yeasts, free fatty acids, oleochemicals, microbial biotechnology, single cell oil, metabolic engineering, industrial biotechnology.

Author's contribution

RL-A and JMN conceived the study. RL-A designed and performed most of the experiments. RD and XN performed some experiments. RL-A wrote the first draft of the manuscript. RL-A, RD, XN and JMN revised the manuscript. All authors read and approved the final manuscript.

List of Abbreviations

TAG: Triacylglycerol, THIOs: Thioesterases, TGLs: Triacylglycerol lipases DCW: Dry Cell Weight, FFA: Free fatty acids.

Competing interests

The authors declare that they have no competing interests

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