Additional file 2

Flow chart figure reporting the workflow of the study

706 strains

Primary screening for lipid production on glucose

Determination of: Nile Red fluorescence; Estimated Intracellular Lipid Yield (EILY) and cell dry weight (DW)

Secondary screening for lipid overproduction on glucose

71 selected strains

Determination of: total lipid yield (Y_L) , cell dry weight (DW), intracellular lipids on cell biomass (Y_L/DW) , lipid coefficient on glucose (Y_L/Glu) and lipid daily productivity (Y_L/d) at optimal growth temperatures (20 or 25 °C)



6 selected strains

Evaluation of lipid production at different temperatures on glucose

Determination of: total lipid yield (YL), cell dry weight (DW), intracellular lipids on cell biomass (YL/DW), lipid coefficient on glucose (YL/Glu), lipid daily productivity (YL/d) and fatty acid profile (FA) at 20 and 25 °C



3 selected strains

Evaluation of lipid production from C3, C5, C6 and C12 carbon sources

Determination of: total lipid yield (YL), cell dry weight (DW), intracellular lipids on cell biomass (YL/DW), lipid coefficient on glucose (YL/Glu), lipid daily productivity (YL/d) and fatty acid profile (FA) on glycerol, xylose, galactose, sucrose, maltose and cellobiose