Abstract

Method for the cultivation of microorganisms of the genus *Thraustochytriales* by using an optimized low salt medium

The invention relates to an optimized method for cultivating microorganisms of the genus *Thraustochytriales*, according to which the microorganisms are cultivated in a low salt medium without adding sodium salts and chloride salts, the total salt content being less than 3.5 g/L (corresponding to less than 10 percent of sea water salt content), whereupon the PUFAs are isolated from the microorganisms and/or the medium. The invention especially relates to novel optimized media having a substantially reduced total salt content, above all particularly reduced NaCl content. The production of PUFAs can be substantially improved and significantly simplified by using a novel combination of different salts as a media composition in which the overall weight ratios of ions do not exceed 1.75 g/L. Furthermore, said medium preferably contains no added sodium salt and chloride salt at all, which helps prevent environmental damages caused by wastewaters containing salt.

[Figure 1]