The invention relates to chemistry and biotechnology, namely to a coordinative compound of cobalt(III) and a process for cultivation of microalga *Porphyridium cruentum* with its use.

According to the invention, a coordinative compound - bis{bis(dimethylglyoximato)chlo-ro}- μ -3-formylpiridineisonicotinoylhydrazone-di-cobalt(III) is claimed, which increases lipid and eicosapentaenoic acid synthesis.

It is also claimed a process for cultivation of microalga *Porphyridium cruentum*, which consists in that microalga is cultivated on a nutrient medium containing, g/L: NaNO₃ - 5.0; NaCl - 7.0; KCl - 7.5; MgSO₄×7H₂O - 1.8; Ca(NO₃)₂×4H₂O - 0.15; KBr - 0.05; KI - 0.05; K₂HPO₄ - 0.2; FeCl₃×6H₂O - 0.0027; ZnSO₄×5H₂O - 0.00002; CuSO₄×5H₂O - 0.00005; MnSO₄×5H₂O - 0.00003; H₃BO₃ - 0.0006; MoO₃ - 0.00002; NaVO₃ - 0.00005; the compound bis{bis(dimethylglyoximato) chloro}- μ -3-formylpiridineisonicotinoylhydra-zone-di-cobalt(III) - 0.008...0.012 and distilled water up to 1 L, having pH 6.8...7.2; at the temperature of 23...25°C, the light of 2000...3000 lx/cm², with slow periodical agitation.

Claims: 2