

a 2017 0018

The invention refers to biotechnology, in particular to a process for cultivation of *Spirulina platensis* cyanobacterium.

The process for cultivation of *Spirulina platensis* cyanobacterium provides for the cultivation on a mineral nutrient medium containing, g/L: NaNO_3 – 2.25; NaHCO_3 – 8.0; NaCl – 1.0; K_2SO_4 – 0.3; Na_2HPO_4 – 0.2; $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ – 0.2; CaCl_2 – 0.024; FeSO_4 – 0.01; EDTA – 0.08; H_3BO_3 – 0.00286; $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ – 0.00181; $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$ – 0.00022; $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ – 0.00008; MoO_3 – 0.000015, water-soluble gold nanoparticles with a size of 5 nm in a concentration of 0.0088...0.0091 g/L and distilled water up to 1 L, at a temperature of 25...28°C, pH 8.0...10.0, with continuous illumination of 3000...4000 lx for 5 days.

The result of the invention consists in increasing the production of spirulina biomass and the content of lipids in biomass in order to obtain raw material for the development and production of anticancer, immunostimulating and antioxidant agents.

Claims: 1