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(54) **Title:** METHOD FOR POLYUNSATURATED FATTY ACID PRODUCTION USING NOVEL CELL PRESERVATION TECHNIQUE

(57) **Abstract:** A method for preservation of a microorganism capable of microbial production of a polyunsaturated fatty acid or a compound comprising a polyunsaturated fatty acid as a constituent fatty acid, which method comprises: (a) forming spores in a spore-forming medium at pH 4-7 containing a nutrient source comprising an inorganic salt and a saccharide; (b) suspending the spores obtained in (a) in sterilized water, or sterilized water containing a surfactant and/or an inorganic salt to prepare a spore suspension, and adding a cryoprotectant at 5-15% to prepare a cryopreserving spore suspension; and (c) preserving the cryopreserving spore suspension obtained in (b) at between -100°C and -20°C.