CyanoCare: novel cyanobacterial polymer for skin care

Have you ever wondered about the amout of chemicals your skin is exposed to every day? If not, you should, especially when nature has so many great options to offer us… acib is developing one of those, and it is called Cyanoflan.

BACKGROUND

Petrochemical synthetic-based components have become increasingly unwelcomed in cosmetics and personal care industry due to public awareness of their long-term risks to the environment and human health. The regulations against their use and the promotion of a low carbon economy have created great pressure to shift to natural, safer, and more environmentally friendly ingredients. Biopolymers can contribute to the solution of this problem because their physicochemical characteristics are interesting not only for their wide biotechnological and biomedical applications, but also thanks to their biodegradability, biocompatibility and non-toxicity.

TECHNOLOGY

Cyanobacteria are powerful phototrophic cell-factories capable of sequestering CO_2 and thus contributing to mitigate climate change, being prolific sources of added-value biocompounds. An especially interesting example is Cyanoflan, a carbohydrate polymer naturally secreted in high amounts by a marine cyanobacterium with low nutritional needs (sun light & sea water), which isolation requires minimal extraction steps resulting in a cost-effective product. Cyanoflan can be used in cosmetic and pharma formulations as a rheology modifier (thickener/stabilizer) while contributing to the protection and regeneration of the skin through antioxidant and anti-inflammatory activities. Moreover, the cultivation of this strain leads to a constant supply of green materials: the extracellular polymer Cyanoflan and the biomass surplus, achieving a zero-waste value chain.

OFFER

Under protection of a CDA/NDA we can provide you with further details about Cyanoflan and this cyanobacterial strain. IP developed in such projects can be fully transferred to you as our investor/industrial partner.

acib-EXPERTS:
Dr. Rita Mota

AVAILABLE FOR:
- Joint Research Project
- Contract Research
- Investments

DEVELOPMENT STATUS:
Technology Readiness Level 4
(Technology validated in lab)

IPR:
US20210093722A1
Others can be generated for our industrial partners / investors

KEYWORDS:
Cyanobacteria
Natural polymers
Cosmetics
Rheology modifier
Bioactivity

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