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〈一般論文〉

*Streptococcus thermophilus*の培養上清を利用した化粧品素材の開発

伊澤直樹*，曽根俊郎，千葉勝由

Development of Cosmetic Ingredient Using the Culture Supernatant of *Streptococcus thermophilus*

Naoki IZAWA*, Toshiro SONE, Katsuyoshi CHIBA

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Abstract

Hyaluronic acid（HA）is an important material used not only for cosmetic but also for medical and food applications. HA is obtained commercially from rooster combs or from fermentation of groups A and C streptococci. In a previous study, we found that *Streptococcus thermophilus* YIT 2084, a strain isolated from a dairy food product, produces HA from skim milk. We have also optimized HA production by investigating the fermentation condition and constructing recombinant strains. In the present study, application of fermentation supernatant of *S. thermophilus* YIT 2084 wild type as a cosmetic ingredient was examined. This supernatant possessed a skin moisturizing effect and a protective effect against cell damage caused by reactive oxygen species. Thus, this supernatant was found to have potential value as a cosmetic ingredient.

Key words: *Streptococcus thermophilus*, hyaluronic acid, skin moisturizing effect, reactive oxygen species.