

〈シンポジウム 21 世紀へ向けた角層研究の幕開け〉
(角層研究の最前線)

角 層 の サ イ ト カ イ ン

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Cytokines in the Stratum Corneum

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Abstract

Stratum corneum contains various kinds of bioactive substances, including cytokines. We previously established a method measuring contents of interleukin 1 α (IL-1 α) and its endogenous antagonist, IL-1 receptor antagonist (IL-1 ra), in the stratum corneum collected by a non-invasive tape-stripping, and employed it for many occasions. It has been revealed that ratio (IL-1 ra/IL-1 α) in the stratum corneum is increased in sun-exposed area, experimentally induced inflammation, lesions in inflammatory disorders. The ratio is especially increased in the face of a group of so-called sensitive skin, and is decreased after use of skin care products designed for sensitive skin. Thus, the ratio is a useful and sensitive marker for evaluating invisible inflammation and efficacy of skin care products. In this review, I will introduce IL-1 system in the epidermis, and will summarize our recent study on the cytokines in the stratum corneum.

Key words: stratum corneum, cytokine, interleukin 1 α , interleukin 1 receptor antagonist.