

〈一般論文〉

化粧品の感覚刺激性評価に有用な評価法の開発

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Development of a Useful Method for Assessing Sensory Irritancy of Cosmetics

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Abstract

Recently, the number of women with self-perceived sensitive skin (SPSS) has been increasing. According to a survey conducted in Japan, approximately 50% of women with SPSS have a history of experiencing some sensory irritation (e.g., stinging and itching) when using cosmetics. To reduce the sensory irritancy of cosmetics, we developed an assay to assess sensory irritancy. First, we conducted a sensory perception test using 1% lactic acid solution to reveal skin properties of women who were highly and reproducibly sensitive to sensory irritation. That survey revealed that women who were highly and reproducibly sensitive to 1% lactic acid showed a low current perception threshold (CPT) and had SPSS and a past history of allergic diseases. We thus selected women who had all of these properties (high susceptibility panel), and then developed an assay of sensory irritancy for this panel. As the assay we developed was able to detect sensory irritation caused by a model skin lotion containing a raw material that may induce sensory irritation, the assay was considered useful for product assessment.

Key words: current perception threshold (CPT), lactic acid, past history of allergic diseases, self-perceived sensitive skin (SPSS), sensory perception test.