

<原 著>

ウサギ耳介内側皮膚を用いたコメド誘発性試験の改良法

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An Improved Method for Evaluation of the Comedogenicity Using Rabbit's Auricular Inside Skin

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Abstracts

We examined a closed patch application method to rabbit's auricular inside skin instead of current open patch method for evaluating the comedogenicity of cosmetic raw materials. Test samples were applied to four sites in the central area of auricular inside skin per rabbit's one ear by closed patch method, and the patches were firmly covered with magic tape for two weeks. After removal of patches, the diameter of follicular eruptions was measured under the magnifying-scope (Derma scope). In this method, maximum 7 test samples and one control were able to apply to only one rabbit.

When the typical comedogens such as isopropyl myristate, oleic acid, and n-tetradecane were applied to rabbit ear skin by this closed patch method, the regional differences among these four sites were almost not observed. The degree of comedogenicity in this closed patch was approximately equal to the open patch method. A good positive correlation was also observed between Derma scope measurement and histological findings in the evaluation of comedogenicity.

From these results, the closed patch application was a useful method to evaluate the comedogenicity of many test samples quantitatively with a few animals, which is considered to be timely now.

Key words: comedogenicity test; rabbit ear skin; closed patch method