

原 著

繰り返し UVB 照射による Hairless mouse の 皮膚変化に対する Sunscreen 剤の効果に関する研究 — シノキサートと二酸化チタンについて —

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Evaluation of Sunscreen Agents which Influence the Skin Changes of Hairless Mice by Repeat UV B irradiation — about Cinoxate and Titanium Dioxide —

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Abstract

To assess the UV-protecting capacity of UV-absorbing or UV-blocking agents, hairless mice applied with 1%, 5% and 10% Titanium Dioxide ethanol suspensions and Cinoxate ethanol solutions were irradiated with the UVB lamps three times a week for 8 weeks.

The unprotected skin of irradiated mice showed mainly epidermal changes such as slight macroscopic hyperpigmentation, increase in the number of DOPA-positive melanocytes and the thickening of the epidermis. 1% Titanium Dioxide suspension had little protecting capacity but 5% and 10% completely inhibited these skin changes. 1% Cinoxate solution had a little effect but 5% and 10% showed no more clear effects than that of 1%. At the concentration above 5%, the protecting capacity of Titanium Dioxide was stronger than that of Cinoxate.