

〈ノート〉

赤血球を用いた UVA 防御剤の *in vitro* 評価法

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In Vitro Evaluation of UVA Sunscreens Using Erythrocytes

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Abstract

In order to develop *in vitro* evaluation of UVA sunscreens instead of protection factor of UVA (PFA), rabbit erythrocytes were irradiated by UVA (350–380 nm) in the presence of hematoporphyrin (HP) as a photosensitizer and UVA sunscreens known and then its hemolysis was measured and the relationship between $1/IC_{50}$ and PFA was investigated. The inhibition of hemolysis depended on the concentration of sunscreens and $1/IC_{50}$ and PFA gave the significantly effective relationship. These results suggested that $1/IC_{50}$ might be an indicator of *in vitro* evaluation of UVA sunscreens.

Key words: UVA, erythrocytes, sunscreen, evaluation, hematoporphyrin.