

〈一般論文〉

*Canarium album* 葉抽出物は過酸化脂質により誘導される  
毛孔異常角化を抑制する

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***Canarium album* Leaves Extract Inhibits Abnormal Follicular Keratinization  
Induced by Lipid Peroxide**

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**Abstract**

Abnormal follicular keratinization (AFK) is caused by extraordinary proliferation and keratinization in follicular infundibulum. Previously, we have reported that accumulation of lipid peroxide (LPO) in follicular infundibulum is involved in induction of AFK. In this study, we investigated the mechanism how LPO induces AFK. Moreover, we examined inhibitory effects of *Canarium album* leaves extract on AFK induction. Proliferation and *interleukin-1alpha* (*IL-1 $\alpha$* ), *keratin16* (*KRT16*) mRNA expression level were significantly increased by treatment of *t*-butyl hydroperoxide (*t*-BuOOH), a kind of LPO, in HaCaT cell. Moreover, proliferation and *KRT16* mRNA expression level were significantly increased by treatment of *IL-1 $\alpha$* . *Canarium album* leaves extract significantly suppressed increase of proliferation and *IL-1 $\alpha$* , *KRT16* mRNA expression level induced by *t*-BuOOH. Based on all results, we considered that LPO induces excessive proliferation and increase of *KRT16* mRNA level which indicates of AFK, through up-regulation of *IL-1 $\alpha$* . *Canarium album* leaves extract has inhibitory effects on AFK by suppressing these LPO-induced phenomena.

**Key words:** *Canarium album*, abnormal follicular keratinization, lipid peroxide, *IL-1 $\alpha$* .