

Vitamin C beautification and whitening in the skin that used SMP30/GNL gene destruction mouse without hair that cannot synthesize vitamin C and scientific proof in effect of anti-wrinkle

Akihito Ishigami

Department of Biochemistry, Faculty of Pharmaceutical Sciences, Toho University

Vitamin C is said that the skin aging is prevented, and there are wrinkle prevention and whitening effectiveness. However, scientific data that proves the effect is a little. The human cannot synthesize vitamin C in the body, however, the dog, the cat, and the mouse can synthesize vitamin C. We recently developed the SMP30/GNL gene destruction mouse without hair that was not able to synthesize vitamin C in the body. In the present study, we examined the time course of vitamin C distribution in the skin by using SMP30/GNL gene destruction mice. After oral vitamin C administration, vitamin C content in the skin peaked at 6 h and then decreased. Thus SMP30/GNL gene destruction mice without hair as a human-like is very useful whole-body animal model for investigating the movement and functions of vitamin C in the skin.