

February 18, 2020 NAGASE & CO., LTD.

Launch of a New Product

NAGASE sets March launch date for Glucosyl Naringin, a citrus-derived anti-aging cosmetic ingredient

NAGASE & CO., LTD. (Tokyo; Kenji Asakura, Representative Director and President) will start sales of Glucosyl Naringin, an anti-aging cosmetic ingredient that promotes the production of elastin, an extracellular matrix protein involved in the maintenance of skin elasticity and the formation of elastin fiber. Launch is scheduled for March 31. The product was developed with enzyme technology provided by Hayashibara Co., Ltd. (Okayama City; Naoki Yasuba, Representative Director and President), which supports NAGASE Group manufacturing. Hayashibara manufactures Glucosyl Naringin.

Naringin is a citrus-derived flavonoid. Although it has long been highly regarded for its wide-ranging characteristics, application in cosmetics has been a challenge due to its low water solubility. Hayashibara developed Glucosyl Naringin by combining glucose with naringin using enzyme technology, which significantly improved water solubility and made application for a wide range of purposes as a new plant-derived functional cosmetic ingredient possible. It was discovered that Glucosyl Naringin promotes the production of elastin and the formation of elastin fiber which something not seen in other raw materials. Elastin is involved in the maintenance of skin elasticity. Therefore, it is expected that Glucosyl Naringin will be effective in reducing wrinkles and skin sagging.



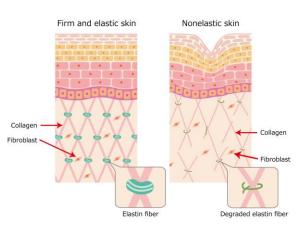
NAGASE will sell Glucosyl Naringin to cosmetic manufacturers both at home and abroad as an ingredient for products with aging care effects. Glucosyl Naringin will be exhibited at the *in-cosmetics global*, one of the world's largest cosmetic ingredient exhibitions, scheduled to be held in Barcelona, Spain from March 31.

NAGASE Group is focusing on the expansion of its Life & Healthcare field, one of the focus area for growth. Concerning its contribution to beauty and health, NAGASE Group continues the global development of high valueadded products by leveraging the Group's comprehensive strengths in manufacturing, processing and research & development functions for better health and lifestyles.



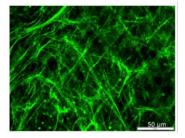
■What is elastin?

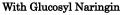
Elastin is an extracellular matrix protein with elasticity found mainly in tissues requiring resilience and elasticity. Elastin forms a fiber structure, which allows elastin and another fiber component, collagen fiber, to combine to play a role in maintaining skin resilience and elasticity. Elastin be produced naturally inside our body; however, it gradually decreases in the skin along with aging, which leads to skin troubles such as wrinkles and skin sagging.

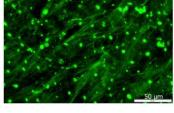


■ Elastin Fibers Microscope Image

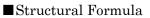
Normal skin fibroblasts were cultured with/without Glucosyl Naringin, and stained by anti-elastin antibody.

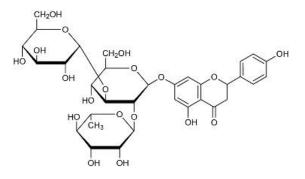






Without Glucosyl Naringin





3"-Monoglucosyl Naringin* Structural Formula *Main ingredient of Glucosyl Naringin

Exhibitions Information

Exhibition name: in-cosmetics global Venue: Fira de Barcelona Dates: Tuesday, March 31 – Thursday, April 2, 2020 Company Name: Nagase (Europa)GmbH (Booth No. H10)

Inquiries

NAGASE & CO., LTD.

Products, Sales & Exhibitions

Personal Care Products Division Hayashibara Products Section, Life & Healthcare Product Department TEL: +81-3-3665-3864 URL: https://www.nagase-personalcare.com/ Email: dnpchb@nagase.co.jp

Media

Corporate Planning Department, Corporate Administration Division TEL: +81-3665-3640 URL: https://www.nagase.co.jp