

SEQENS

PERSONAL CARE

CELEBR'AGE GETTO

Getto leaf extract from Okinawa
Island longevity secrets

THE WELL-AGING SOLUTION

Slow aging enhancer

Cell connection booster

Skin complexion perfector



Okinawa Island a « blue zone » showing an exceptional longevity¹



Our inspiration comes from Blue Zones: micro-regions recognized by scientists because of the unusually high proportion of long-lived individuals and their **exceptional healthy longevity**. In collaboration with Michel Poulain, the expert in longevity studies, the Innovation team of Seqens Personal Care has focused their research on these areas.

Okinawa Island, part of the archipelago of Japan, is one of these blue zones with **4 to 5 times more centenarians** than Western populations (around 80 per 100,000 inhabitants)². But why do we find more centenarians on this island than anywhere else? Are there any exceptional longevity secrets?

Investigating « pro-longevity » influencers

Psychosocial & lifestyle factors explain longevity and healthy aging

True social connections seem to be key in aging well.³ The concept of «moai» (meeting for a common purpose in Japanese) highlights the positive impact of a secured emotional environment on longevity.⁴ Okinawan Centenarians are physically independent thanks to their daily physical exercise. The “Traditional Okinawa Diet”, rich in plants, is often mentioned in order to explain the healthy longevity of the Okinawan population, including the traditional consumption of certain local plants.

Getto is at the heart of the Okinawan diet

This plant is highly popular in traditional Okinawan cuisine, the leaves being abundantly and freely available in the wild. Also known as ‘shell ginger’, the fresh leaves are used as a beverage, including in tea, or for wrapping mochi (a traditional Okinawan rice cake), steamed buns and fried meat and fish.

Obtained from Getto leaf extraction, Seqens Personal Care created **Celebr’age™Getto**, a Well-ageing active ingredient inspired from an exceptional longevity source to **enhance the beauty & the health of aging skin**.

A responsible partnership

Seqens Personal Care has built a **strong partnership** with farmers in Okinawa who use traditional methods of Getto agriculture.

Protection of soils and compliance to organic standards are one of their priorities as they promote **sustainable and non-intensive farming** methods with crop security by working with mature Getto plants.

We’re taking part in a **circular economy**; 100% of the plant is utilized: the stalk for paper & fragrance industries, the plant for pharmaceutical & beauty industries, and the seeds for beverages.

DNA tested Celebr’age™ Getto is certified organic.



In vitro

Mechanism of action

Enhancement of dermo-epidermal connections

CELEBR'AGE™ GETTO (AT 2%) TRANSCRIPTOMIC PROFILE OF AGED FIBROBLASTS

Extracellular Matrix assembly	Biglycan	↑↑↑
	Dermatopontin	↑↑
	Elastin	↑↑↑
	Tenascin	↑↑↑
	Collagen type IV, alpha 2	↑↑↑
Cell-cell / cell-matrix interaction	Integrin alpha 11	↑↑↑
Inflammation	Prostaglandin endoperoxide synthase 2	↓↓

↑↑↑ > 300% vs untreated

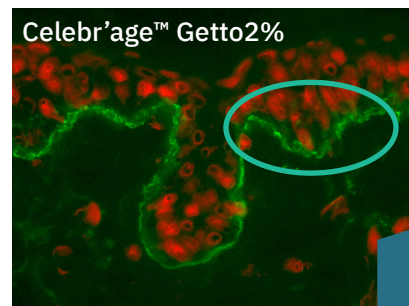
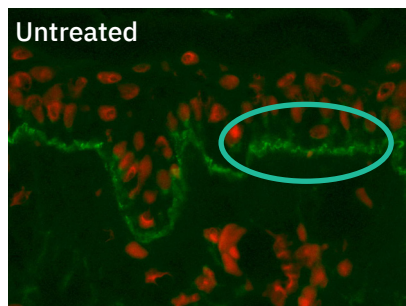
↑↑ > 200% & < 300% vs untreated

↓↓ < 30% vs untreated

Celebr'age™ Getto stimulates gene expression involved in Extracellular matrix (ECM) assembly, ECM-cell, and cell-cell assembly, while reducing the expression of a marker of inflammation

Ex vivo

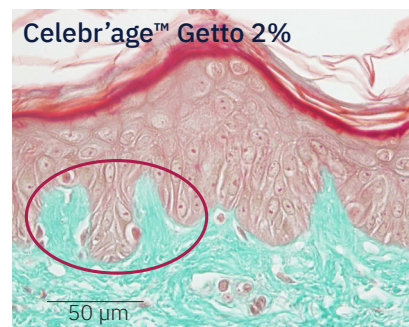
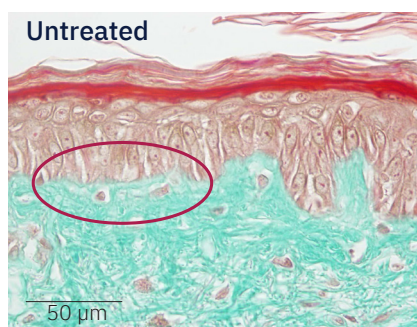
LAMININ 5 STAINING



+39%**
after 10
days

** $p < 0.01$ vs untreated

DERMO-EPIDERMAL JUNCTION INVAGINATION



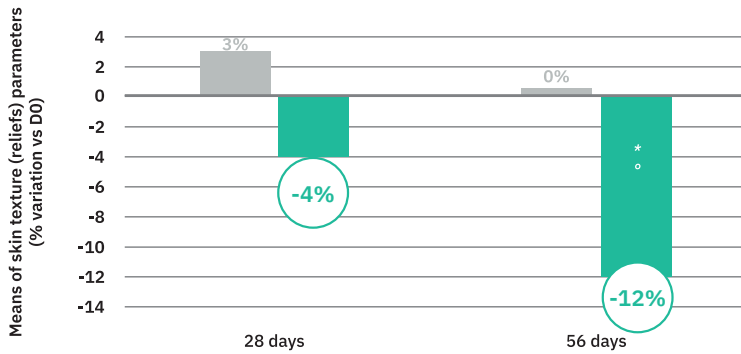
Abdominoplasty skin explants

Celebr'age™ Getto significantly boosts laminin 5 synthesis for a healthier skin appearance and DEJ morphology

In vivo

Skin texture, elasticity and glow

SKIN TEXTURE EVALUATION: TOPOGRAPHY ANALYSIS



PROTOCOL

- On 25 women between 40 and 60 years old, with urban lifestyle
- Celebr'age™ 2% formulation
- Placebo formulation
- Half-face application during 56 days
- Evaluation at D0, D28, D56, visia CR

- Skin texture
Evaluation at D0, D28, D56, cutometer,
- Skin elasticity
• Evaluation at D0, D28, D56, chromameter
- Skin glow

- Pictures of panelists are taken at D0, D28, D56

°p<0.1 significantly different versus placebo

#p<0.1 significantly different versus D0

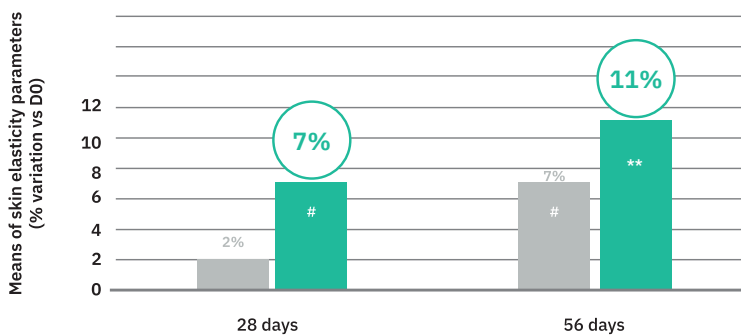
*p<0.05 significantly different versus D0

**p<0.01 significantly different versus D0

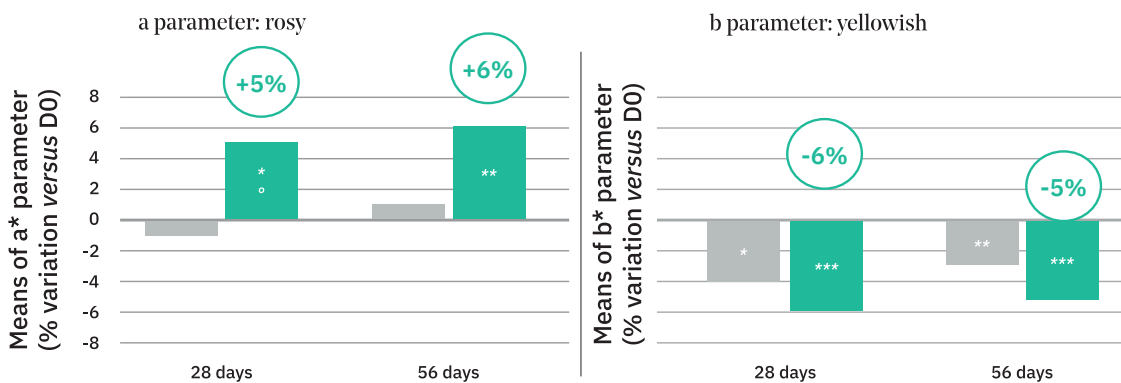
***p<0.001 significantly different versus D0

■ Celebr'age Getto 2%
■ Placebo

SKIN ELASTICITY EVALUATION



MEASUREMENT OF SKIN RADIANCE



D0



D28



After 28 days, skin radiance, elasticity and smoothness (reduction of skin reliefs) are visibly enhanced, with a global skin improvement. The skin has a healthier appearance thanks to an increased rosy rather than yellowish tone.

Product Information

Reference	BLD0-GET-10
INCI	AQUA, PROPANEDIOL, ALPINIA SPECIOSA LEAF EXTRACT
China IECIC 2021	Listed

Product description

Physical form	Liquid
Color	Yellow to light brown
Odor	Characteristic

Use

Recommended percentage of use	2 to 4%
Formulation	Add at the end of the formulation at 30°C

Efficacy

Biological efficacy	Enhances healthy connections between the epidermis and dermis, via improvement of dermo epidermal junction-anchoring, together with a boosting of DEJ markers such as laminin 5.
Clinical efficacy	Helps improve skin texture and glow

Marketing information

Cosmos status	Certified
Trademark	Celebr'age Getto
Origin	Japan (Okinawa)

Claim suggestions

- Gives a healthier skin appearance
- Makes the skin glow
- Smoothes the skin texture
- Helps to maintain an efficient skin connection
- Helps to boost extra-cellular matrix synthesis
- Helps to enhance production of dermo-epidermal structures

Trend applications

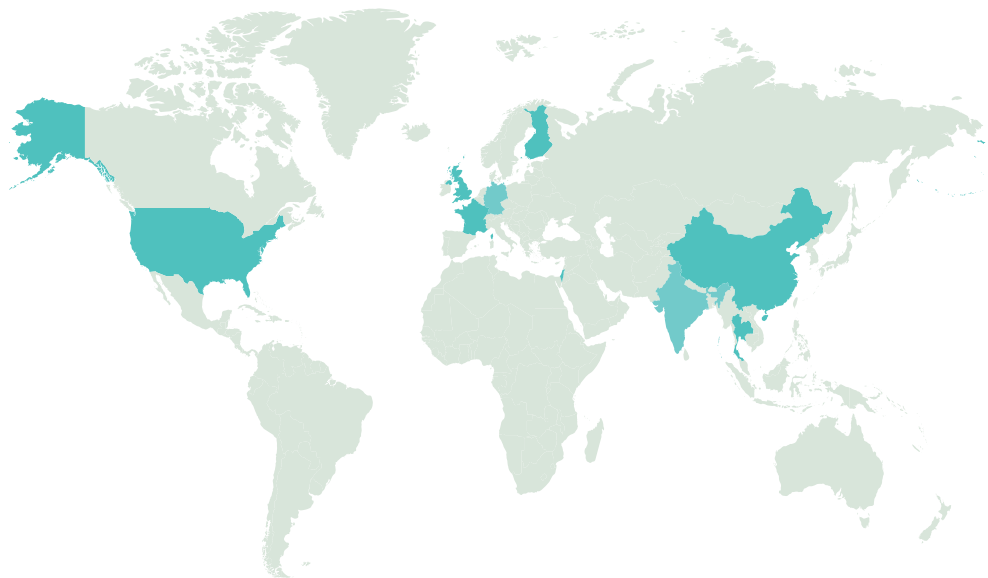
- Premium skincare
- J-beauty
- Well aging concept
- Pro-aging serum
- Regenerating mask
- Plant-related (unique and rare)



BIBLIOGRAPHY

- 1 Poulain, Michel, Anne Herm, and Gianni Pes. «The Blue Zones: areas of exceptional longevity around the world.» *Vienna Yearbook of Population Research* (2013): 87-108.
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- 3 Willcox, D. Craig, et al. «Life at the extreme limit: phenotypic characteristics of supercentenarians in Okinawa.» *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* 63.11 (2008): 1201-1208.
- 4 Teschke, Rolf, and Tran Dang Xuan. «A Contributory Role of Shell Ginger (Alpinia zerumbet (Pers.) BL Burtt. & RM Sm) for Human Longevity in Okinawa, Japan?» *Nutrients* 10.2 (2018): 166.

SEQENS, an integrated global leader in pharmaceutical synthesis, specialty and personal care ingredients



3,300
people



300
scientists, experts
and engineers



9
countries



9
R&D centers

ABOUT SEQENS PERSONAL CARE

Created in 2003, SEQENS is an integrated global leader in pharmaceutical synthesis, specialty and personal care ingredients, delivering outstanding performance, unrivaled market responsiveness and bespoke solutions to our customers.

SEQENS Personal Care manufactures a wide range of natural actives ingredients, preservative boosters and multifunctionals for the cosmetic market.

Our strong pharmaceutical heritage and health expertise allows us to provide:

- Strong expertise in synthesis from high potent to simple molecules
- Strict respect of quality, global compliance, environmental regulations
- Unique R&D and large production capacities for new development and scale up activities
- FLAGSHIP technologies such as flow chemistry, multi-catalysis, fractionated distillation...

SEQENS is committed to a CSR approach for over 15 years (Gold & Platinum Ecovadis certifications).



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OUR SCIENCE FOR YOUR FUTURE

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