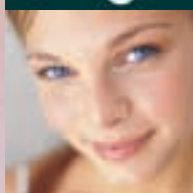


ISP

BIOPEPTIDES

Vincienc
BIOFUNCTIONALS

Collaxyl® IS

Description

Collagen hexapeptide clinically proven to significantly reduce the length and depth of wrinkles.

The sequence of COLLAXYL IS is comparable to sequences found in human collagen XVII, a collagen specific to the dermo-epidermal junction (DEJ).

Skin injury leads to enzymatic degradation of the skin constituents and liberates many different bio-functional peptides. Amongst these naturally occurring fragments short active collagen peptides, such as collagen XVII fragments from which COLLAXYL IS is derived, stimulate new extracellular matrix protein synthesis and skin repair.

COLLAXYL IS is unique in its capacity to regenerate both the epidermis and the dermis.

Properties

- Rapidly decreases the appearance of skin wrinkles
- Enhances epidermal repair
- Enhances dermal protein synthesis (collagen types I and III)
- Improves the dermal-epidermal junction structure (laminin-5, integrins, collagen IV)
- Stimulates epidermal differentiation markers (keratin, filaggrin)

Cosmetic applications

- Anti-aging, anti-wrinkle products
- After-shave skin care products
- Post-depilatory, post-scrubbing skin care products
- Skin care products for cold and dry conditions
- Hand care products

Vincienc™ Biofunctionals

In-vitro and ex-vivo efficacy

1. Skin Regeneration

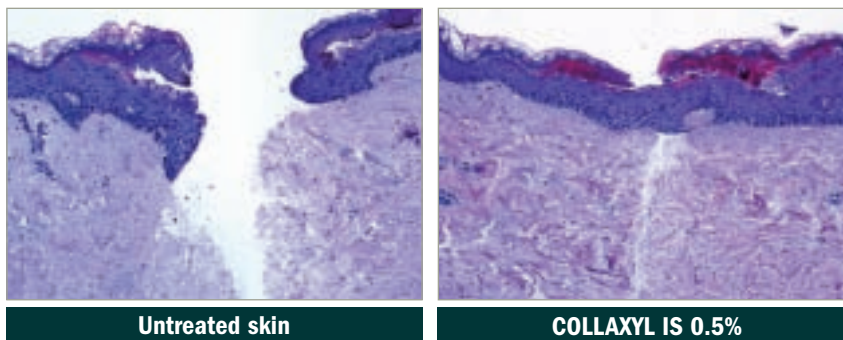
The expression of several major components of the skin has been evaluated after the application of COLLAXYL IS on *ex-vivo* human skin, or *in-vitro* on a culture of human fibroblasts. The studied skin proteins were revealed by green immunostaining. In parallel, the blue or red fluorescence reveals the cells' nuclei.

	Epidermis		Dermo-epidermal junction		Dermis
	Filaggrin	Integrin β 1	Collagen IV	Laminin-5	Collagen I (16 hours)
Control					
COLLAXYL IS					
Vitamin C					
	<i>Ex-vivo</i> (COLLAXYL IS 0.5%)				<i>In-vitro</i> (COLLAXYL IS 0.75%)

At dermal level, COLLAXYL IS rapidly triggers an increase of collagen I and III expression (data not shown). This peptide also promotes collagen IV and Laminin-5 synthesis in the DEJ. Improvement of several epidermal differentiation markers (filaggrin, keratin) is also observed. All results show greater and faster effects than vitamin C.

2. Tissue repair

Ex-vivo human skin, treated by one single application of COLLAXYL IS 0.5%, was experimentally wounded and compared to untreated skin at 72 hours.



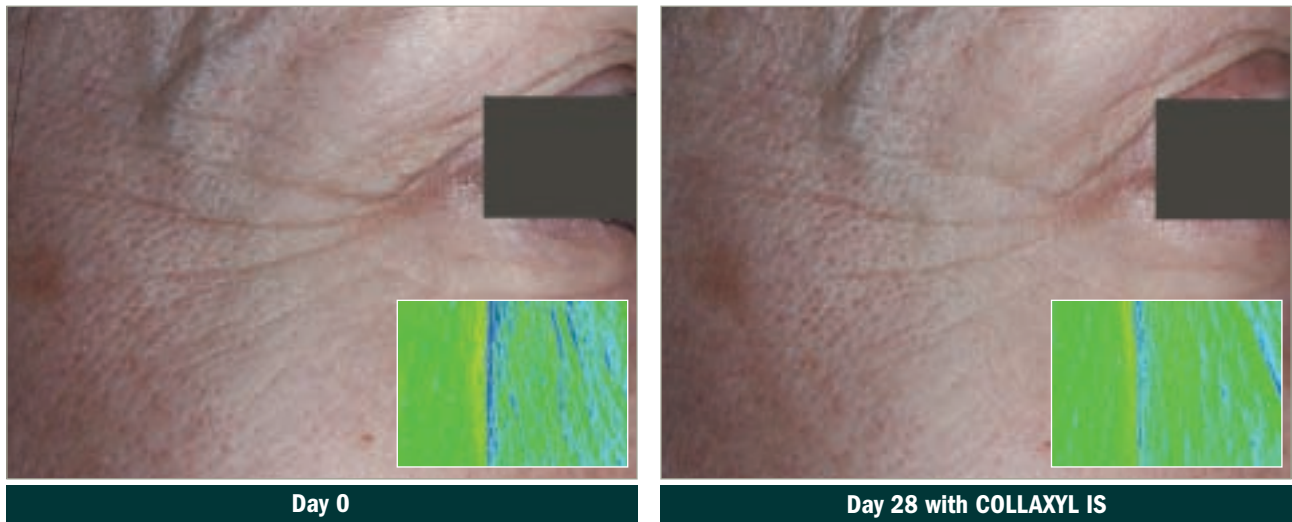
COLLAXYL IS facilitates complete and rapid epidermal regeneration, together with good dermal repair.



In-vivo efficacy: anti-wrinkle effect

The clinical test was carried out on 20 healthy female volunteers, aged between 40 and 62. A gel formulated with COLLAXYL IS at 1.5% (GP4G IS at 1%) was used twice a day for 4 weeks and tested against a placebo gel.

Skin wrinkles were evaluated clinically and by quantitative analysis of silicon replica.

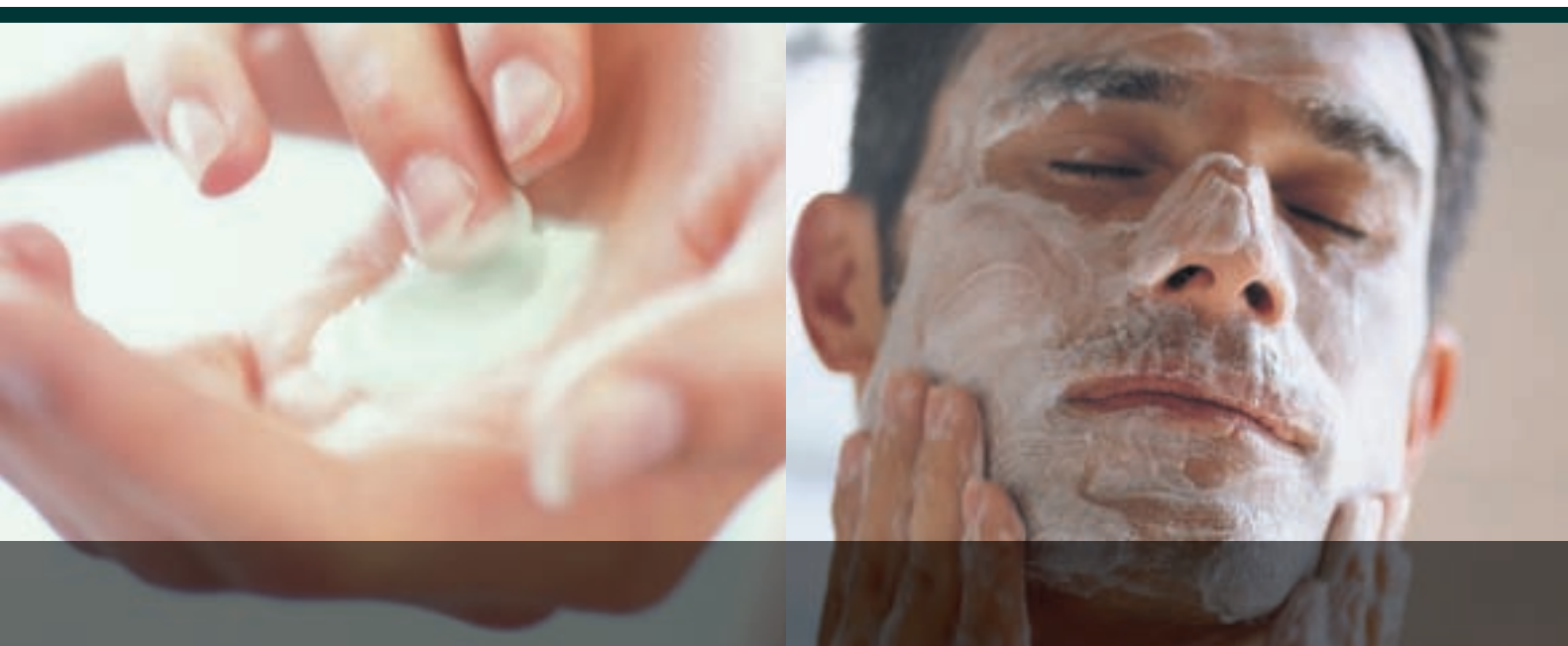
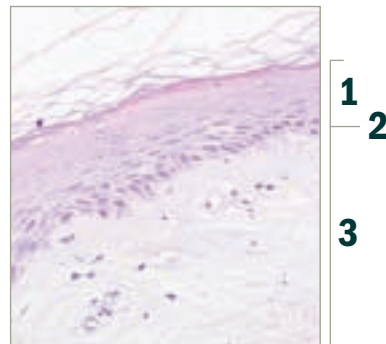


	Total surface (mm ²)	Number of wrinkles	Total length (mm)	Average depth (µm)
PLACEBO (D28 – D0)	+ 0.6	+ 5.2	+ 4.8	+ 6
COLLAXYL IS (D28 – D0)	- 0.6	- 3.9	- 5.3	- 5.2

The results demonstrate that COLLAXYL IS performs deeply and intensely on wrinkles, and therefore is highly suitable for anti-aging skin care products.

COLLAXYL IS has significant effects on wrinkle reduction and skin structure through different activities at 3 levels of the skin:

1. Epidermal regeneration and differentiation
2. Dermo-epidermal junction regeneration
3. Collagen synthesis and dermal regeneration



Specifications

Form:	Limpid solution
Color:	Colorless
Odor:	Characteristic
Solubility:	Water soluble
Preservatives:	Preservative-free

INCI Name

WATER (AND) BUTYLENE GLYCOL (AND) HEXAPEPTIDE-9

Formulation Guidelines

- Effective pH range 4.5 - 7.5
- Add post-emulsification at 40°C with perfume and preservative. Thermostable to 80°C
- Recommended use levels: 0.5% - 1.5%, clinically tested at 1.5%

The above formulation information is for guideline purposes only. Some products may be formulated outside of the parameters of these guidelines. Please contact ISP Vincience for more specific information.



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