



PRO-COLL-ONE+[®]

COLLAGEN I PERFORMANCE

As part of SILAB's range «SILAB actives you can't perform without», PRO-COLL-ONE+[®] is the benchmark ingredient in collagen I synthesis.

The effective qualities of this natural active were demonstrated by *in-vitro* and *in-vivo* studies conducted in comparison with control molecules and a synthetic peptide (Palmitoyl Pentapeptide-3).

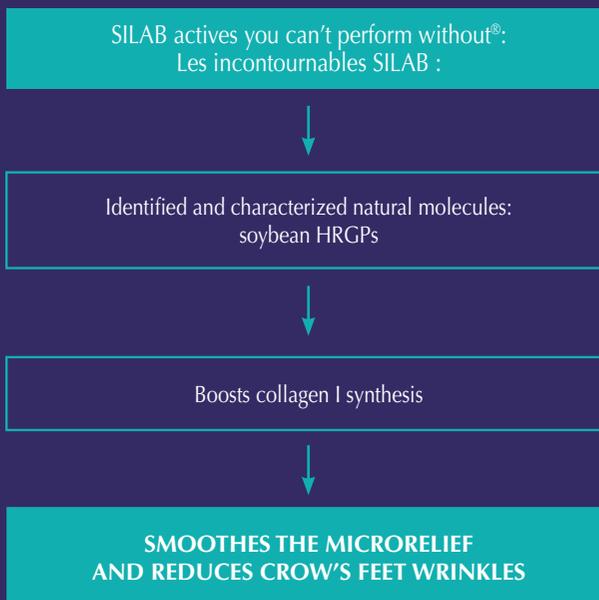
Containing highly purified HRGPs glycopeptides obtained from soya, PRO-COLL-ONE+[®]:

- > boosts collagen I synthesis
- > smoothes surface micro-relief and reduces crow's feet wrinkles.

Selected from over 300 potential candidates, PRO-COLL-ONE+[®], thanks to its powerful and targeted effectiveness, consolidates the dermal mattress and strongly reduces wrinkles. It is the indispensable anti-age care product.



SILAB - Hélène FOURNIÉ



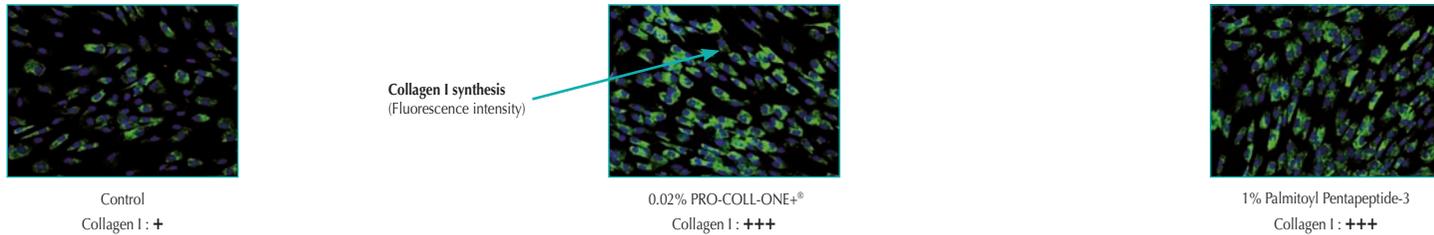
IN VITRO STUDIES

Highly purified HRGPs glycopeptides obtained from soya, PRO-COLL-ONE+® is the benchmark ingredient in collagen I synthesis. Selected from over 300 potential candidates, PRO-COLL-ONE+®, thanks to its powerful and targeted effectiveness, consolidates the dermal mattress. Enable to smooth the micro-relief and to strongly reduce wrinkles, it is the indispensable active for all anti-aging strategy.

Effect of PRO-COLL-ONE+® on the synthesis of collagen I in comparison with Palmitoyl Pentapeptide-3

Quantification by ELISA assay

Tested at 0.25%, PRO-COLL-ONE+® significantly stimulates the synthesis of collagen I by normal human fibroblasts by 1190%. This effect is dose-dependent and is comparable to that of 1% Palmitoyl Pentapeptide-3.



IN VIVO STUDIES

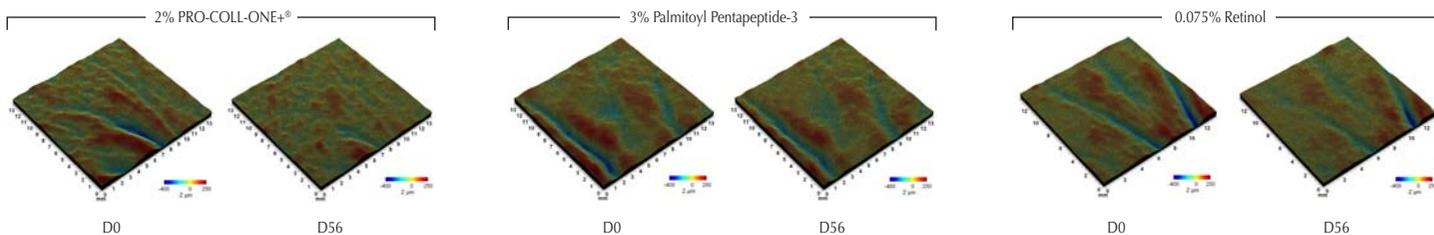
The description of the panel selected and studies conducted is detailed in the product dossier. All studies below were conducted in the following way:

- PRO-COLL-ONE+® study: 2 groups of 25 healthy female volunteers. Placebo group mean age 54±8 years - PRO-COLL-ONE+® group mean age 53±8 years
- Reference molecules study (Palmitoyl Pentapeptide-3 and retinol) on 43 volunteers as follows: 31 half faces for the placebo (55±9 years) - 27 half faces for Palmitoyl Pentapeptide-3 (54±10 years) 28 half faces for retinol (52±9 years)

Study of the anti-wrinkles properties of PRO-COLL-ONE+® in comparison with Palmitoyl Pentapeptide-3

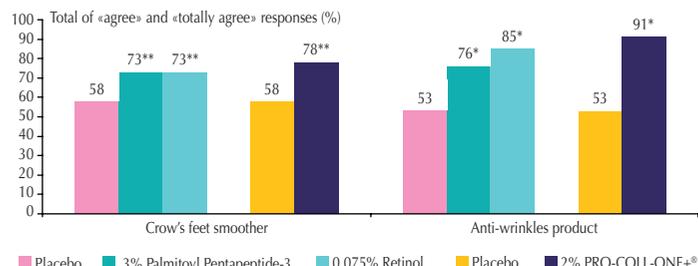
Study by interference fringe projection

In the conditions of this study, after 56 days of twice daily applications and in comparison to the placebo, PRO-COLL-ONE+® formulated at 2% in an emulsion significantly reduces parameter Sa by 9.8% (P = 0.0014) and parameter Sq by 9.5% (P = 0.0026). It smoothes skin relief of the crow's feet. Moreover, PRO-COLL-ONE+® significantly reduces wrinkles by decreasing negative volume by 21.1% (P = 0.0010) and positive volume by 27% (P = 0.0014). Compared to Palmitoyl Pentapeptide-3 formulated at 3% or retinol formulated at 0.075% and tested in the same conditions, the effect of PRO-COLL-ONE+® is comparable for all parameters after 56 days of treatment.



Subjective evaluation of PRO-COLL-ONE+® in comparison with Palmitoyl Pentapeptide-3

After 56 days of twice daily applications, PRO-COLL-ONE+® formulated at 2% was generally seen as more effective than the placebo. 78% of the volunteers using PRO-COLL-ONE+® reported that their crow's feet were smoother compared to the placebo group (P = 0.0761). Compared to Palmitoyl Pentapeptide-3 formulated at 3% and retinol formulated at 0.075%, and tested in the same conditions, PRO-COLL-ONE+® was judged by the volunteers to be comparable to these two reference molecules. In addition, more than 90% of them considered that the formula containing PRO-COLL-ONE+® is an anti-wrinkles product (P = 0.0016).



*: significant differences according to the Z test (P<0.05) / **: significant differences according to the Z test (P<0.10)

TECHNICAL SHEET

- Latin name : *Glycine soja*
- I.N.C.I. name: Hydrolyzed Soybean Fiber
- Cas N°: 68607-88-5

- Form
- Aqueous solution
- Aspect: limpid liquid
- Odor: characteristic
- Color: amber

- Analytical features
- Dry matter: 22 - 32 g/l
- Total sugar (Dubois method): 12 - 22 g/l
- Hydroxyproline : ≥ 18 mg/g of proteins
- pH : 5.0 - 6.0
- Stabilizer: Ethylhexylglycerin 0.20%
- Preservative: Phenoxyethanol 0.50%

- Bacteriology
- Sterile product
- No yeast and mould present
- No pathogenic germs present

- Packaging
- Sterile 1L and/or 5L plastic container

- Storage
- Store preferably at 20°C in a dark place

- Use
- Fully soluble in aqueous medium
- Solubility in ethanol : soluble up to 20/80 ethanol/water (v/v)
- Can withstand temperatures up to 80°C for at least two hours
- Stable between pH 5 to 10
- Recommended amount : 1 to 2%

- Innocuousness
- ✓ Evaluation of sensitizing capacity on human volunteers with normal skin : Non irritant
- ✓ No mutagenicity according to the Ames test
- ✓ Non phototoxic
- ✓ Non cytotoxic
- ✓ Determination of irritant potential on human skin (méthode Marzulli-Maibach) : Non sensitizing



B.P. 213 - 19108 Brive Cedex - France --- Plant : Z.I. de la Nau - 19240 Saint Viance
Phone: (+33) 555 84 58 40 - Fax: (+33) 555 84 95 64 --- www.silab.fr - e-mail: silab@silab.fr

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