



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

SILAB actives you can't perform without[®]:
Les incontournables SILAB :



Identified and characterized natural molecules:
soybean HRGPs



Boosts collagen I synthesis



**SMOOTHES THE MICRORELIEF
AND REDUCES CROW'S FEET WRINKLES**

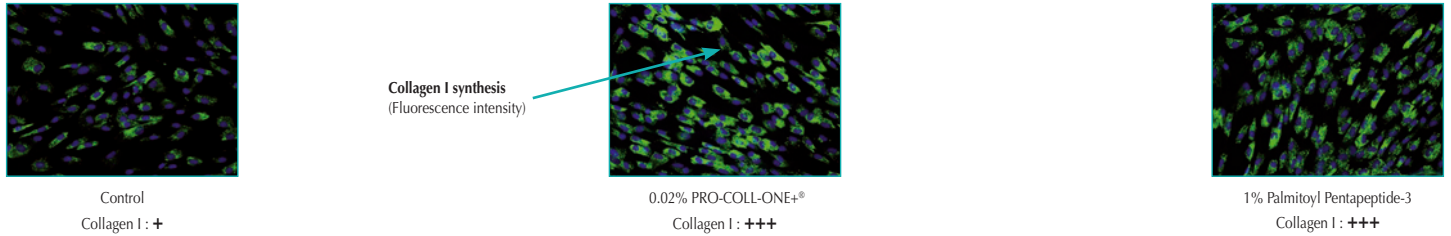
IN VITRO STUDIES

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

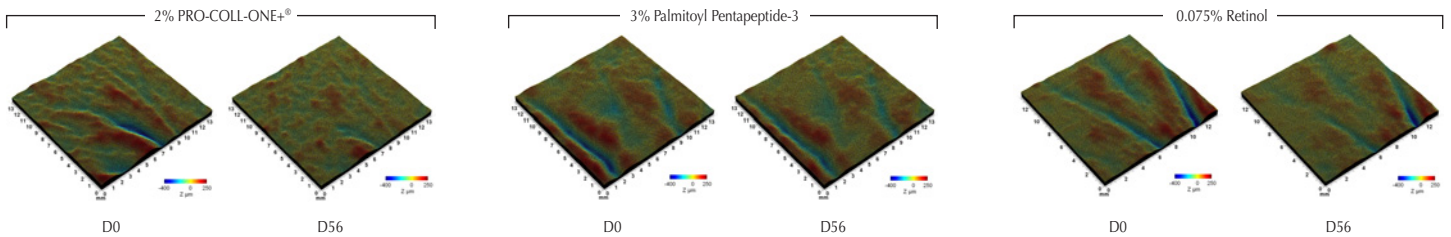
The description of the panel selected and studies conducted is detailed in the product dossier. All studies below were conducted in the following way:

- 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±9years)

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

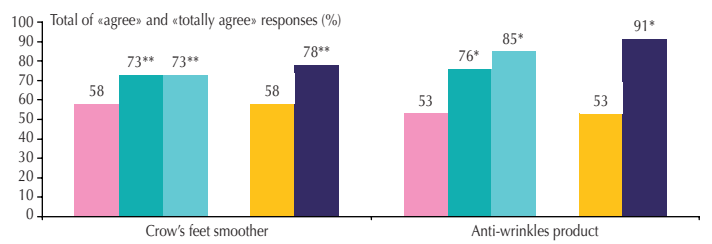
Study by interference fringe projection

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 Soy 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 (methode Marzulli-Maibach) : Non sensitizing

Warning

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