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.
**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.

&middot; **Control**

&middot; **Collagen I**

&middot; **0.02% PRO-COLL-ONE+®**

&middot; **Collagen I**

&middot; **1% Palmitoyl Pentapeptide-3**

&middot; **Collagen I**

**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±6 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).

**TechniCal SHEET**

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

**Analytical features**

- **Form**: Aqueous solution
- **Aspect**: Limpid liquid
- **Color**: Amber
- **pH**: 5.0 - 6.0

**Use**

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

**Bacteriology**

- **Sterile product**
- **No pathogenic germs present**
- **No yeast and mould present**
- **Hydrolyzed proteins**: ≥ 14 mg/g of proteins
- **Stabilizer**: Ethylhexylglycerin 0.20%
- **Preservative**: Phenoxyethanol 0.50%
- **Non cytotoxic**
- **Non phototoxic**
- **No mutagenicity according to the Ames test**
- **Innocuous**
- **Evaluation of sensitizing capacity**
- **Non irritant**
- **Non sensitizing**

**Packaging**

Sterile 1L and/or 5L plastic container

**Storage**

Store preferably at 20°C in a dark place

**Total of «agree» and «totally agree» responses (%)**

- **Crow’s feet smoother**: Placebo 58%, Palmitoyl Pentapeptide-3 73%, Retinol 78%
- **Anti-wrinkles product**: Placebo 3%, Palmitoyl Pentapeptide-3 76%, Retinol 85%, PRO-COLL-ONE+® 91%
Warning

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