

# CollPerfect<sup>™</sup> P6

# Bio-optimized collagen peptide for ageless beauty



CollPerfect<sup>™</sup>P6 is an encapsulated bioactivating hexapeptide with a sequence based on the human skin type I collagen. It stimulates collagen synthesis and encourages dermal remodeling, effectively rejuvenating the skin and improving its overall quality and appearance.

#### The issue

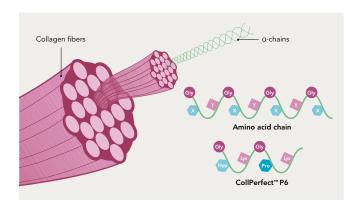
Type I collagen is a crucial protein for youthful skin, making up 80–85% of the skin's dermal extracellular matrix (ECM). It forms a fibrous network that supports skin structure, influencing elasticity and firmness by interacting with components like elastin and hyaluronic acid. As we age, starting around 30, collagen production decreases, leading to visible signs of aging. Recent studies suggest that declining collagen levels might not just be a consequence of aging but a potential cause, highlighting collagen enhancement as a promising strategy for maintaining youthful skin.

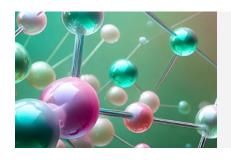
#### The solution

CollPerfect™ P6 is designed to trigger skin revival and promote youthfulness. It features a six amino acid peptide based on type I collagen structure of human skin, composed of Gly-HyP-Lys-Gly-Pro-Lys. This design allows for easier skin penetration and improved solubility. Encapsulated in liposomes for stability and spray granulated on maltodextrin, the biocompatible peptide replicates damaged collagen fragments to act as a signaling molecule. This potentially activates the skin's regenerative processes, encouraging fibroblasts to produce more collagen and ECM components like hyaluronic acid.

#### The benefit

In vitro and placebo-controlled in vivo studies have shown that CollPerfect™ P6 upregulates the expression of genes involved in ECM production and oxidative response, reduces the expression of genes linked to inflammation, increases the production of procollagen I and hyaluronic acid, protects dermal collagen from aging, enhances skin elasticity and firmness, improves dermal skin density and tightening, and visibly reduces facial skin sagging. These results demonstrate CollPerfect™ P6's ability to counteract natural skin aging processes and improve overall facial skin quality, offering a targeted approach to skin rejuvenation.





#### Source

CollPerfect<sup>™</sup> P6 is a six amino acid peptide that contains the characteristic triplet sequence Gly-X-Y of the native human skin type I collagen and its most abundant amino acids.

INCI (EU/PCPC) Declaration: Collagen Amino Acids (and) Lecithin (and) Maltodextrin (and) Aqua/Water

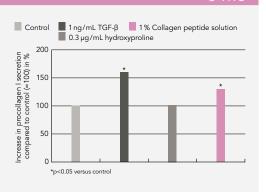


Cell line: Human dermal fibroblasts

**Test compound/treatment:** Treatment with 1% collagen peptide solution, untreated (control) for  $48\,h$ . Further controls hydroxyproline and TGF- $\beta$ 

**Parameters:** Procollagen I released in the culture supernatant (ELISA)

→ Treatment with a 1% collagen peptide solution demonstrated a significant boost in procollagen I release that surpassed the control by 30%



## Clinical Face Remodeling

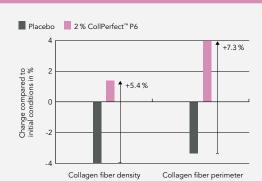
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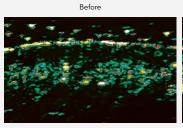


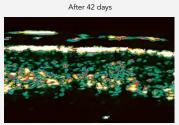
Volunteers: 23 women (50–62y) with signs of aging
Test compound/treatment: Application of a cream containing
2% CollPerfect™P6 to one side of the face, placebo on the other side for 6 weeks

Parameters: • Skin smoothness (AEVA system)

- Skin elasticity (Cutometer device)
- Dermal density (ultrasonography images)
- Collagen fiber density and perimeter (Confocal Laser Scanning Microscopy)
- → Significantly increased skin elasticity by 15%
- → Significantly increased skin smoothness by 2%
- → Increased collagen fiber density by 1.4% in contrast to a decrease of 4% by the placebo
- → 6.3% increase in dermal density after 6 weeks. This improvement is visibly demonstrated in the ultrasonography images, where CollPerfect™P6 promoted a denser dermis with higher integrity and a structured ECM







**In Addition** S-1204/S-1207/S-123



**Dermal Matrix Support Despite Aging:** In a skin aging model, treatment with 2% CollPerfect<sup>™</sup> P6 maintained 96% of dermal collagen compared to 87% with no treatment and 90% with a placebo. This indicates that CollPerfect<sup>™</sup> P6 significantly prevents collagen loss and maintains dermal structure.



**Tightening of the Facial Contour:** A study on 23 women (50–62y) examined the facial contour. 3D images were taken after 6 weeks (VECTRA® XT system). Treatment with 2% CollPerfect<sup>™</sup> P6 reduced the contour distance from the ear to the chin by 0.8, showing a tightening effect on the facial contour and a visible anti-sagging effect.



**Increase in Hyaluronic Acid Release:** A test on human dermal fibroblasts showed that a 0.3% solution increased hyaluronic acid (HA) release by 263%, outperforming the positive reference TGF-β. This boost in HA supports skin elasticity and firmness.

Recommended use level: 2%

**Characteristics:** Powder, water-soluble, without preservatives and alcohol **Applications:** Collagen boosting serums, anti-wrinkle intensive eye contour creams, procollagen firming night creams, plumping collagen masks, collagen boosting foundations, wrinkle repair creams, 'Collagen banking' formulas to prevent early collagen breakdown

**Moreover:** Non-animal source, encapsulated for endhanced penetration and stabiltiy, Collagen Amino Acids as INCI declaration

### Benefits of CollPerfect™ P6

- Promotes procollagen I production
- Boosts hyaluronic acid release
- Protects the dermal collagen fibers from aging
- Tightens facial contours
- Increases skin elasticity and density

