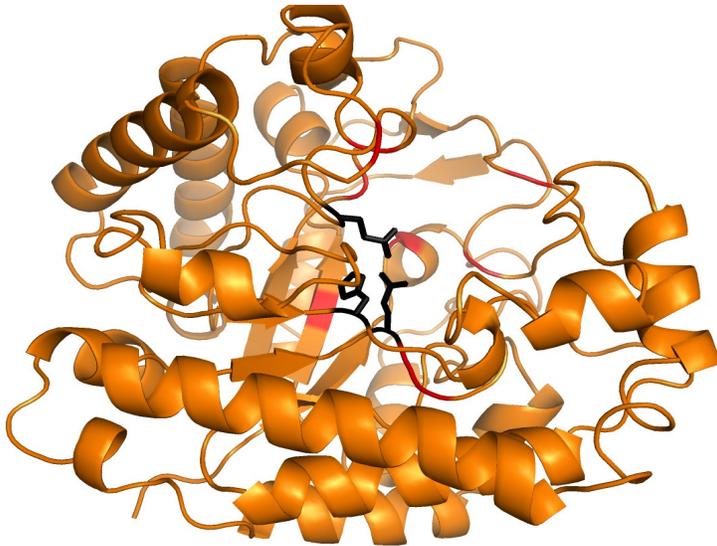


AC Collagen Prepeptide PF



harness peptide technology
increase collagen production +
reduce the appearance
of wrinkles
plump + firm the skin with this
seaweed derived animal alternative

BACKGROUND

Many researchers over the years have determined that breaking down collagen with either alkaline, or enzymatic hydrolysis produces a product that can increase the collagen production of cultured cells three-fold. Alkaline, and to a lesser extent enzymatic hydrolysis, produce random peptide fragments which cannot be relied upon to produce consistent results in cell culture models. Further biochemical research has revealed that the sequence Glycine-Proline-Hydroxyproline (G-P-Hyp) is the active present in collagen hydrolysates.

Modern peptide synthesis, using novel base labile amino-protective groups, has made the production of highly purified, amino acid sequences a viable tool to today's cosmetic chemists. AC Collagen Prepeptide PF is a three-chain amino acid sequence that replicates the amino acid sequence which occurs throughout our own collagen protein structure. The amino acid sequence is Glycine-Proline-Hydroxyproline (G-P-Hyp).

SCIENCE

Many researchers over the years have determined that breaking down collagen with either alkaline, or enzymatic hydrolysis produces a product that can increase the collagen production of cultured cells three-fold¹.

Amino acids are naturally occurring components, which provide the building blocks of life, joining together to form protein chains. In the past, it has been possible to produce peptide sequences by breaking down larger protein molecules through either acidic or enzymatic hydrolysis. Typically, bovine collagen was used for this purpose. However, this method of peptide production is difficult to control and a multitude of peptide sequences can be produced. The level of the active G-P-Hyp tripeptide is therefore irregular and diluted.

Today, using these basic amino acid building blocks, we can produce natural, biomimetic peptides, thus bio-identical activity. Amino acids can be sourced from many different plants and animals.

Code Number: 20452PF

INCI Name: Tripeptide-29

INCI Status: Conforms

REACH Status: Compliant

CAS Number: 92113-31-0

EINCS Number: 295-635-5

Origin: Botanical

Processing:

GMO Free

No Ethoxylation

No Irradiation

No Sulphonation

Additives:

Preservatives: None

Antioxidants: None

Other additives: None

Solvents Used: Water

Appearance: Clear to Slightly Hazy
Liquid

Soluble/ Miscible: Water

Ecological Information:

100% Biodegradability

Microbial Count:

<100 opg, No Pathogens

Suggested Use Levels: 0.1 - 1.0%

Suggested Applications: Wrinkle
Reduction, Plumping, Firming

Benefits of AC Collagen Prepeptide PF:

- Increases Collagen Production
- Reduces Appearance of Wrinkles
- Plumps the Skin
- Peptide Technology

AC Collagen Prepeptide PF

BENEFITS

This pure peptide is the synthetic form of G-P-Hyp tripeptide that can significantly increase collagen synthesis and repair the skin. Degradation of collagen is one of the leading causes of wrinkle formation. Topical applications of soluble collagen can mask the appearance of wrinkles. However, maintaining collagen levels is imperative in a comprehensive, anti-aging skin care regimen.

AC Collagen Prepeptide PF is a pure (>99.7%) G-P-Hyp tripeptide where the Proline and Hydroxyproline are sourced from Glutamic Acid, a proteinogenic amino acid, which is found abundantly in certain Seaweeds. Glycine on the other hand is derived from ammonia. AC Collagen Prepeptide PF is produced without the use of animal derived products or genetically modified organisms. With a molecular weight of 285 D it shows excellent bioavailability. This product is ideal for anti-aging skin care applications where promoting wrinkle reduction, firming and plumping benefits are desired.

EFFICACY

AC Collagen Prepeptide PF is pure (>99.7%) G-P-Hyp tripeptide produced synthetically, without the use of animal derived products or genetically modified organisms. With a molecular weight of 285 Da it shows excellent bioavailability. In-vitro experiments have shown that this material will dramatically increase synthesis of Collagen I.

Mean Collagen Synthesis

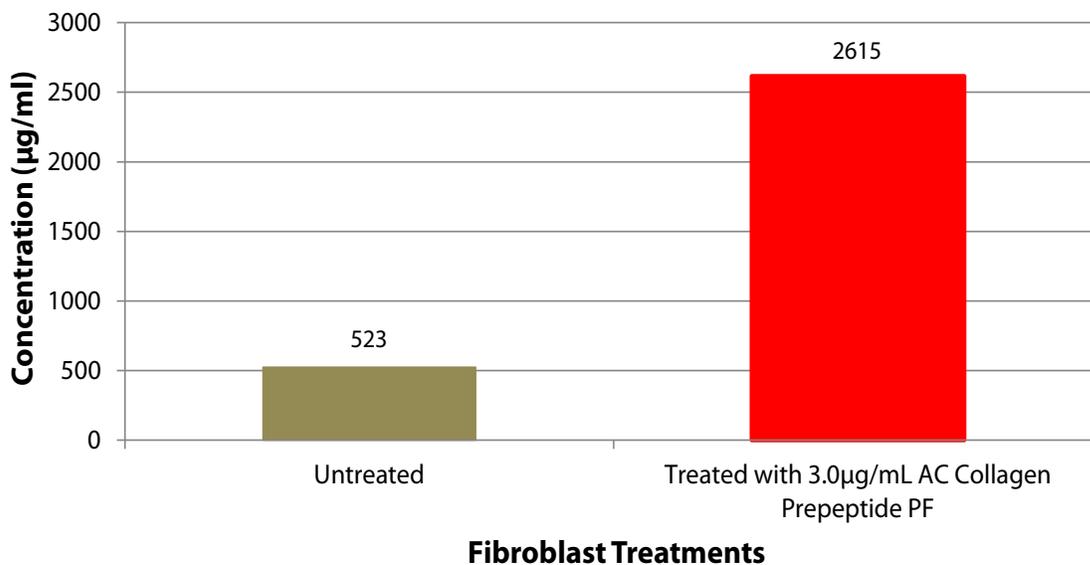


Figure 1. Improvements in collagen synthesis following application of AC Collagen PrePeptide PF.

Active Concepts LLC • Lincolnton, USA • www.activeconceptsllc.com • Tel +1 704-276-7100 • info@activeconceptsllc.com



Active Concepts, America Latina
 Monterrey, N.L. Mexico
www.activeconcepts.al.com
 Office: +52 (81) 1971 9846
info@activeconcepts.al.com

Active Concepts S.r.l.
 Milano ITALY
www.activeconcepts.it
 Tel +39 02 90360719
info@activeconcepts.it

Active Concepts LLC, Asia
 Kaohsiung, Taiwan
www.activeconceptsllc.com
 Tel + 886 73599900
josephyeh@activeconceptsllc.com