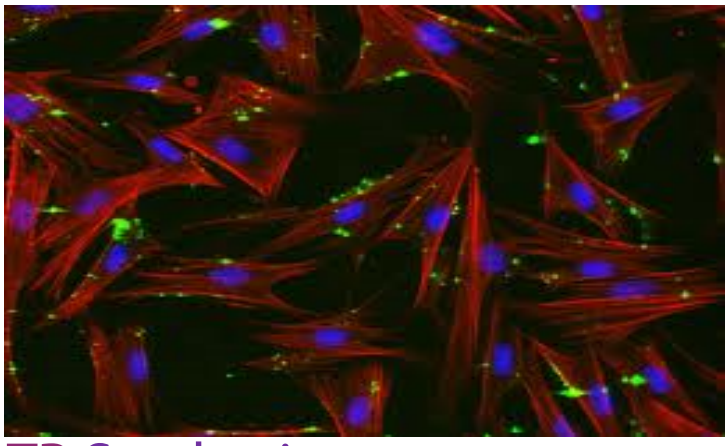
AC DermaPeptide Revitalizing PF



ATP Synthesis
fibroblasts
Cellular Revitalization
proliferation
hydrolyzed rice protein
Anti-Aging, protection

BACKGROUND

There is an increasing interest in the relationship between nutrition and the aging process, beginning with the skin. A revolutionary concept, developed to revitalize the skin, **AC DermaPeptide Revitalizing PF** is a peptide that produces an array of anti-aging benefits. Targeting fibroblasts in cosmetics is a pioneering technology that has become quite popular and Active Concepts is always keeping up with the latest trends. Active Concepts developed **AC Dermapeptide Revitalizing PF**, which is a peptide that stimulates the proliferation of fibroblasts, therefore improving cell propagation and an increase in cellular metabolism that results in improved collagen synthesis, reduction in wrinkles, and an increase in smoothing and toning.

SCIENCE

Fibroblasts are connective tissue cells that make and secrete collagen, glycoproteins and other macromolecules within the extracellular matrix. They are important in maintaining the health of our skin. These cells are involved in many aspects, such as moisturization, wound healing and cell revitalization.

As we know, size can be a determining factor when it comes to the function and activity of peptides. n Smaller peptides are typically more readily absorbed than large peptides. **AC DermaPeptide Revitalizing PF** was developed from rice proteins, which have several advantages and are relatively small molecules, typically less than 1400Da. Even though amino acids are even smaller in size, they solely act as nutritional building blocks and are not actively functional, unlike peptides that are actively functional.

BENEFITS

The benefits of this product will indeed be noticed with a flawless and younger looking complexion. A series of in-vivo and *in-vitro* tests support that **AC DermaPeptide Revitalizing PF** is efficient in revitalizing the skin and improving previous damage that would potentially lead to accelerated extrinsic aging.

EFFICACY

An *in-vitro* ATP Assay was conducted if 2.0% **AC DermaPeptide Revitalizing PF** can increase of ATP synthesis, which indicates an increase in cellular metabolism.

Code Number: 20454PF

INCI Name: Hydrolyzed Rice Protein
INCI Status: Conforms
REACH Status: Compliant
CAS Number: 100209-45-8
EINCS Number: 309-353-8

Origin: Botanical
Processing:
GMO Free
No Ethoxylation
No Irradation
No Sulphonation
Additives:
Preservatives: None
Antioxidants: None
Other additives: None
Solvents Used: N/A
Appearance: Clear to Slightly Hazy Liquid
Soluble/ Miscible: Water
Ecological Information:
100% Biodegradability
Microbial Count: <100 opg, No Pathogens

Suggested Use Levels: 1.0 – 4.0%
Suggested Applications: ATP Synthesis, Cellular Proliferation, Cellular Revitalization

Benefits of **AC DermaPeptide Revitalizing PF**:

- Cellular Revitalization
- Proliferation
- Moisturizing

AC DermaPeptide Revitalizing PF

ATP, or adenosine triphosphate, is indicative of cellular metabolism, as it is the molecule from which cells derive energy. If ATP levels increase, we can assume that cellular metabolism is increasing as well. **AC DermaPeptide Revitalizing PF** showed a significant increase in ATP levels compared to the control. After 24 hours there was approximately a 42% increase in ATP levels from **AC DermaPeptide Revitalizing PF**. We can assume that **AC DermaPeptide Revitalizing PF** is capable of increasing ATP synthesis and metabolic function of cells.

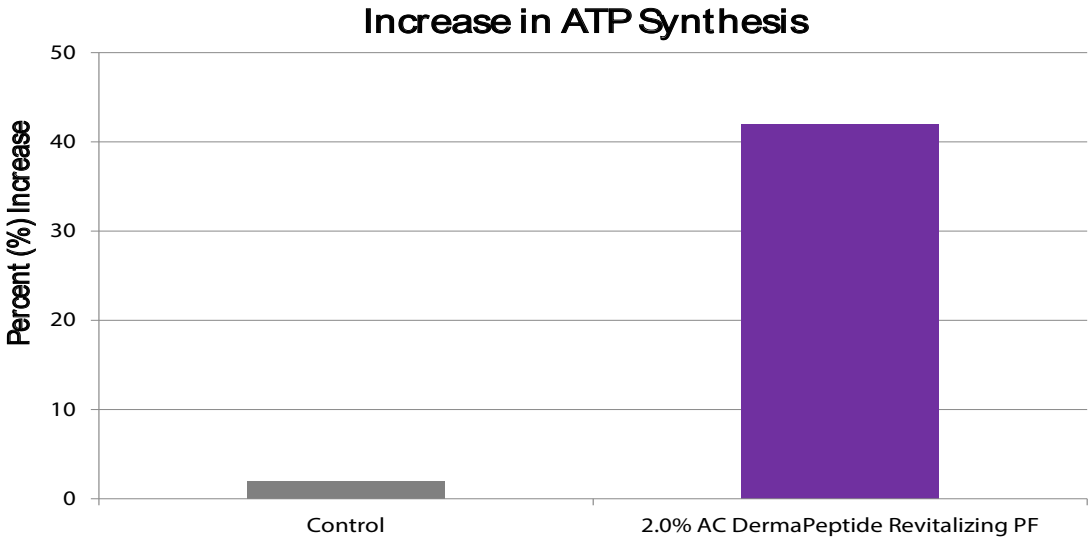


Figure 1. Increased levels of ATP synthesis due to the application of **AC DermaPeptide Revitalizing PF.**

Additionally, we conducted an *in-vitro* assay within an amino acid deficient medium in order to determine the supplemental effects on fibroblast growth, thus compensating for nutritional deficiencies and determining the nutritional advantages of **AC DermaPeptide Revitalizing PF.** This was compared to controls (non-irradiated and irradiated). The results showed that **AC DermaPeptide Revitalizing PF** can improve cellular migration and cellular proliferation.

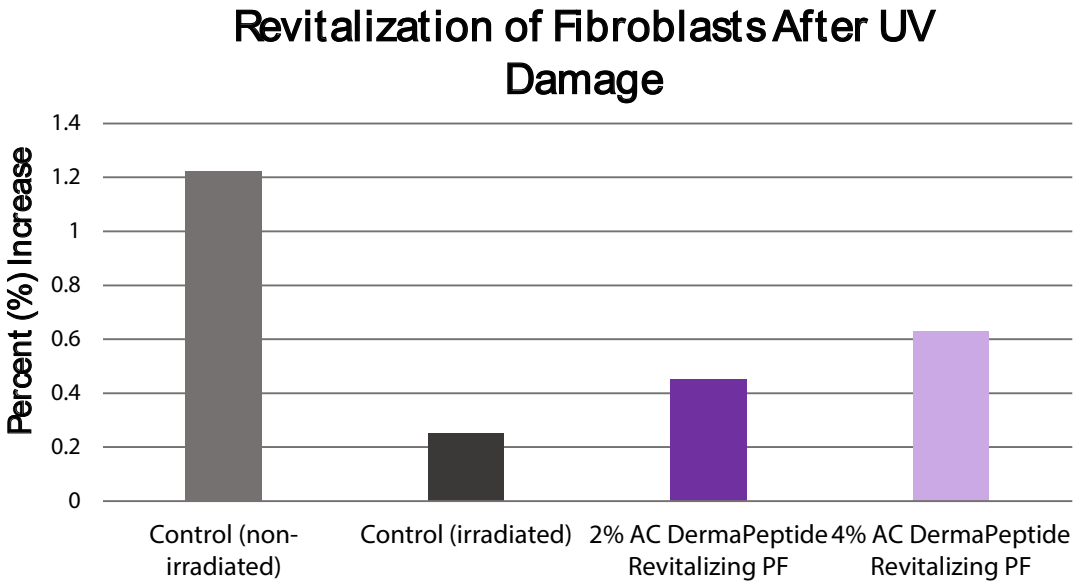


Figure 2. Cellular revitalization after damage following application of **AC DermaPeptide Revitalizing PF**

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