

# AC Griffonia Lysate Advanced



forefront of modern skin care  
**Neuro-Cosmetics**  
 immediately perceivable  
 tightening + longer term anti-aging  
 don't worry  
 be happy

## BACKGROUND

"When you look good, you feel good." The thought shared by all cosmetic and personal care consumers is: The products we use, make us feel good. These feelings that accompany the use of cosmetics push neuro-cosmetics to the forefront of modern skin care. Serotonin, a neurotransmitter known to promote feelings of happiness, can be capitalized on and marketed as such, to seamlessly enhance products specifically designed as neuro-cosmetics. The naturally occurring amino acid, 5-hydroxytryptophan (5-HTP), is the chemical precursor in the biosynthesis of serotonin. When used, 5-HTP transforms personal care formulas into true neuro-cosmetics, capable of making consumers feel and look good. AC Griffonia Lysate Advanced takes advantage of the 5-HTP content in griffonia seeds, providing formulators with a neuro-cosmetic material that delivers immediately perceivable results and long-term benefits for anti-aging skin care.

## SCIENCE

Griffonia, a shrub native to parts of Africa, has developed a unique defense mechanism to protect itself from extreme sun exposure. The seeds of the plant contain 5-HTP, which, as previously mentioned, is the chemical precursor of the neurotransmitter, serotonin.

In addition to being a "feel good" chemical, this neurotransmitter has demonstrated its ability to protect human melanocytes from UV-induced apoptosis. By inhibiting UV induced damage, we can help ameliorate anticipated skin damage caused by over exposure. We can naturally and gently isolate the 5-HTP from the plant for use in cosmetics. Since the plant is constantly under intense UV exposure it needed to evolve a means to protect itself from UV damage and research has shown that 5-HTP content in the plant is integral to its survival. In the plant 5-HTP inhibits UV-induced apoptosis or programmed cell death.

**Code Number: 16634**

**INCI Name:** Griffonia Simplicifolia Seed Extract

**INCI Status:** Conforms

**REACH Status:** Approved

**CAS Number:** 999999-99-4

**EINCS Number:** 310-127-6

**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:** < 100pg, No Pathogens

**Suggested Use Levels:** 1.0 - 10.0%

**Suggested Applications:** Anti-Aging, UV Protection, Tightening, Lifting

## Benefits of AC Griffonia

### Lysate Advanced:

- Immediately Perceivable Results
- Neuro-Cosmetic
- Allows for 5-HTP and Serotonin Claims
- Long Term Anti-Aging Benefits
- UV Protection
- Tightening and Lifting

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Furthermore, Active Concepts extracts the high molecular weight carbohydrates from this African shrub during the manufacturing process for additional anti-aging benefits. High molecular weight carbohydrates act as strong film-formers and are responsible for perceivable sensorial benefits, specifically tightening, associated with AC Griffonia Lysate Advanced.

## BENEFITS

The combination of components that make up AC Griffonia Lysate Advanced result in a long-term anti-aging product which also imparts a tangible and supple film on the skin. This film not only protects against environmental damage, but also immediately tightens and lifts the skin, revealing a firm, younger-looking complexion.

## EFFICACY

When studying human monocytes following UV exposure, the results indicate that 5-HTP is capable of limiting apoptosis. The decrease in apoptosis is due to the decrease in UV induced damage, which triggers the cell death. Clearly these findings suggest that using 5-HTP may be a novel approach to inhibiting extrinsic damage caused by UV radiation.

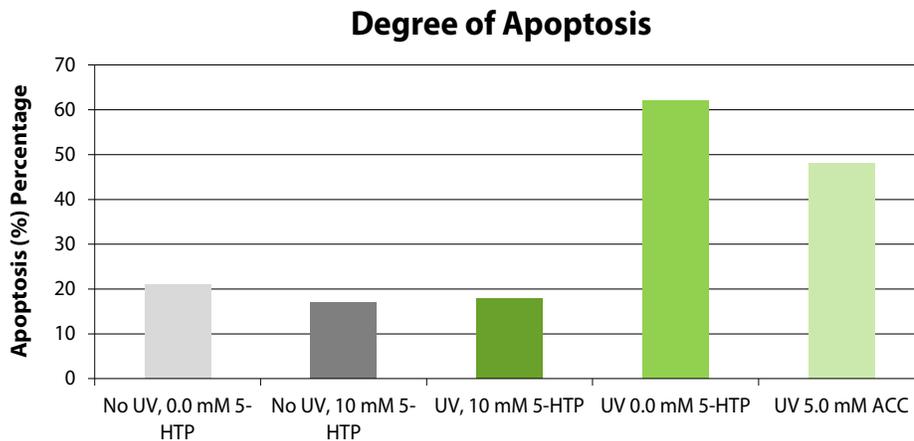


Figure 1. An increase in the concentration of 5-HTP shows a decrease in UV induced apoptosis

An *in vivo* sensory study was conducted to evaluate the immediate tightening benefits of **AC Griffonia Lysate Advanced**. Volunteers were asked to apply a base O/W emulsion containing 5% of this ingredient on the eye area and rate the perceived tightening benefits after three minutes of application. Results indicate that a 59% increase was obtained when using this distinct material. Additionally before and after pictures were taken to illustrate the fine line- fading and lifting immediate benefits. Pictures were taken before application of the product as well as three minutes after application. Figures 2 and 3 clearly show a significant reduction on the appearance of fine lines and wrinkles following a single application of the product.



Figure 2. Subject #3 before application of 5.0% AC Griffonia Lysate Advanced



Figure 3. Subject #3 after application of 5.0% AC Griffonia Lysate Advanced

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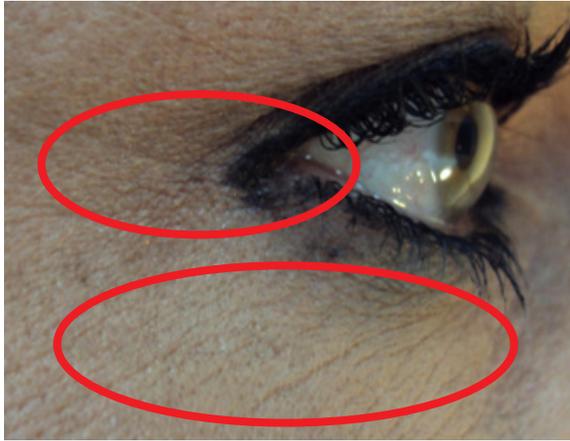


Figure 4 . Subject #8 before application of 5.0% AC Griffonia Lysate Advanced

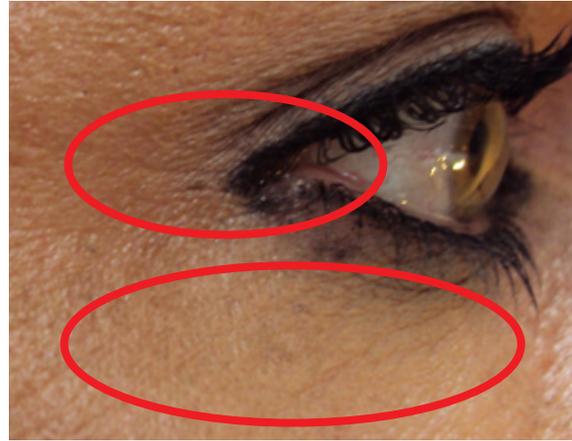


Figure 5. Subject #8 after application of 5.0% AC Griffonia Lysate Advanced

Reference:

- 1) Lysek, Nicola *et al.* L-5Hydroxytryptophan: Antioxidant and Anti-Apoptotic Principle of the Intertidal Sponge Hymeniacidon Heliophila. A Naturforsch; 58c:568-572 (2003).

Active Concepts LLC • Lincolnton, USA • [www.activeconceptsllc.com](http://www.activeconceptsllc.com) • Tel +1 704-276-7100 • [info@activeconceptsllc.com](mailto:info@activeconceptsllc.com)



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

Active Concepts S.r.l.  
Milano ITALY  
[www.activeconcepts.it](http://www.activeconcepts.it)  
Tel +39 02 90360719  
[info@activeconcepts.it](mailto:info@activeconcepts.it)

Active Concepts LLC, Asia  
Kaohsiung, Taiwan  
[www.activeconceptsllc.com](http://www.activeconceptsllc.com)  
Tel + 886 73599900  
[josephyeh@activeconceptsllc.com](mailto:josephyeh@activeconceptsllc.com)