



Volumizing Assay

info@activeconceptsllc.com • Phone: +1-704-276-7100 • Fax: +1-704-276-7101

Tradename: ACB Pisum Sativum Peptide

Code: 16810

Lot #: NC180315-F

CAS #: 100209-45-8

Test Request Form #: 4643

Sponsor: Active Concepts, LLC; 107 Technology Drive Lincolnton, NC 28092

Study Director: Erica Segura

Principle Investigator: Maureen Danaher

Test Performed:

Volumizing Assay

Abstract

Hydrolyzed proteins, such as Oat, Soy and Wheat have been used in hair care as a traditional means to hydrate the hair and provide strengthening properties. Until recently, hydrolysis was induced using acid, water, or fermentation. Active Concepts has implemented an innovative hydrolysis approach to the newest and most bio-available vegetable protein on the market, Pisum Sativum Peptide. This microorganism prompted hydrolysis creates the by product, lactic acid, as a secretion which provides volumizing and anti-aging benefits measured.

Materials and Methods

The hair samples used in this study were tested using identical intervals and percentages of two protein hydrolysates, **ACB Pisum Sativum Peptide** and Wheat Hydrolysate. The materials used in the procedure to determine the diameter of each strand were an untreated control hair sample, the control hair sample (treated with 2.0% Wheat Hydrolysate Solution), and the sample treated with the test material (2.0% **ACB Pisum Sativum Peptide**). Each hair was imaged and measured before a solution was applied. The hairs were then removed from the slide and either placed in the 2.0% solution of the Wheat Hydrolysate or the 2.0% solution of **ACB Pisum Sativum Peptide**. Each hair was removed, measured and imaged then placed aside. After four hours, each hair was reimaged and measured to demonstrate sustained volume potential of each respective hydrolyzed protein.

This information is presented in good faith but is not warranted as to accuracy of results. Also, freedom from patent infringement is not implied.
This information is offered solely for your investigation, verification, and consideration.

Results

Effects on Hair Diameter

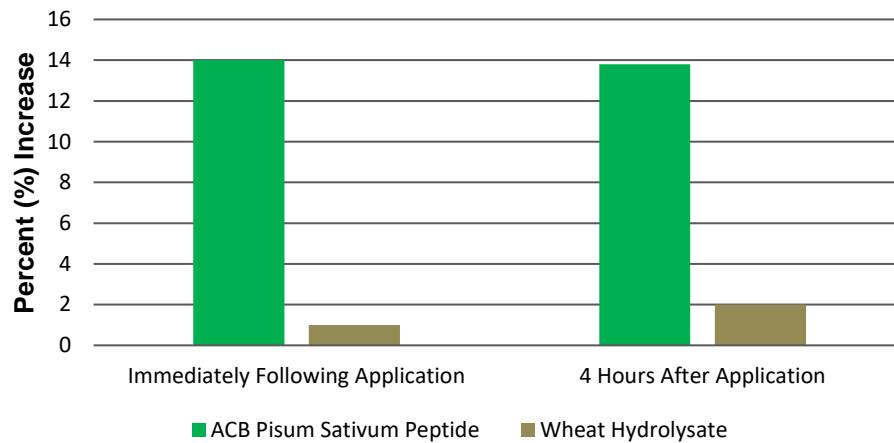


Figure 1. Percent increase in hair diameter over time after treatment with **ACB Pisum Sativum Peptide** and Wheat Hydrolysate

Microscopy Imaging of Individual Hair Strands



Figure 2: Individual strand immediately following treatment with wheat Hydrolysate (note beading)



Figure 3: Individual strand immediately following treatment with **ACB Pisum Sativum Peptide**



Figure 4: Individual strand 4 hours after treatment with wheat Hydrolysate

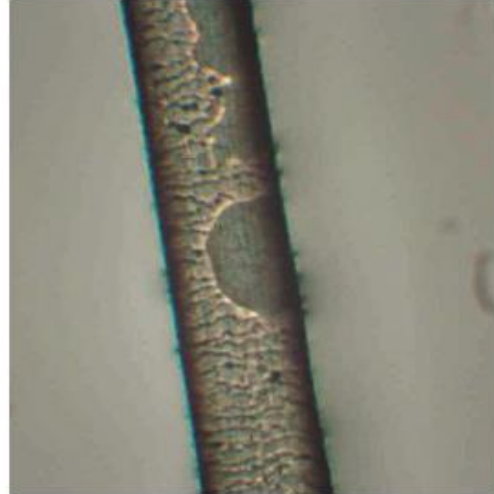


Figure 5: Individual strand 4 hours after treatment with **ACB Pisum Sativum Peptide**

Discussion

Immediate results showed an average increase in hair diameter of 14.08% with an average increase of 13.65% four hours following the initial application. After placing individual hair strands under a microscope, Microscopy Imaging of the individual strands were taken to visually demonstrate the increase in hair diameter achieved when using **ACB Pisum Sativum Peptide** at 2.0% in a solution compared to the use of Wheat Hydrolysate at 2.0% in a solution. **ACB Pisum Sativum Peptide** is able to effectively volumize the hair for thicker and younger looking hair, a revolutionary step for anti-aging hair care products.