

Salon Half-Head Hair Study



functional active
 botanical replacement of both
 petrolatum and lanolin
 barrier protection,
 intense moisturization, sustainable
 standardized for EFAs, super fruit

ABSTRACT

The condition of the cuticle (the outer most layer of the hair) significantly affects both the manageability and sleekness of our hair. Overtime, hair can become damaged, which can result in the cuticle lifting because of both environmental and styling influences and processes. The result: lifeless, dull hair that is difficult to manage. Improving the sleekness of hair has been shown to instantly create a healthier more youthful appearance. Increasing combability not only eases manageability, but also helps to minimize physical damage that perpetuates the loss of body and difficulty in styling.

ABS Acai Sterols EFA is a product designed to provide soothing and hydration benefits to the skin and hair. However, this unique ingredient also enhances smoothing, anti-frizz, overall feel, shine and hydration when used in hair care applications. The purpose of this study was to confirm whether **ABS Acai Sterols EFA** is capable of providing benefits when included in a shampoo and conditioner on ethnic hair types.

A half head study was conducted to determine the comparison of a control shampoo vs. 2.0% **ABS Acai Sterols EFA** in the control shampoo. Additionally, a comparison between the control conditioner and 2.0% **ABS Acai Sterols EFA** in the control conditioner were reported. Each volunteer's hair was photographed prior to the treatment and again after the shampoo and conditioner had been applied and the hair was styled. The images of the half head study were used in conjunction with a sensory assessment subjectively rating the parameters - cleansing, smoothing, dry and wet combability, anti-frizz, overall feel, shine and hydration. This assessment was conducted both before and after treatment. Based on the results obtained, **ABS Acai Sterols EFA** is capable of enhancing the smoothing, anti-frizz, overall feel, shine and hydration, making it an ideal ingredient for use in products intended for thick, unruly or ethnic hair types.

Code Number: 10414

INCI Name: Euterpe Oleracea Sterols & Linoleic Acid & Oleic Acid & Linolenic Acid

INCI Status: Approved

REACH Status: Complies

CAS Number: 68990-51-2 & 60-33-3 & 112-80-1 & 463-40-1

EINCS Number: 273-605-2 & 200-470-9 & 204-007-1 & 207-334-8

TRF#: S15

Lot Number(s):

NC 150410- H, NC 150410- I

Suggested Use Levels: 1.0 - 10.0%
Use Level for Assay: 2.0%

Sponsor:

Active Concepts, LLC
 107 Technology Drive
 Lincolnton, North Carolina 28092

Study Director: Erica Segura

Principle Investigator:
 Maureen Danaher

Suggested Applications: Soothing, Moisturization, Anti-Frizz, Hydration

Benefits of **ABS Acai Sterols EFA**:

- Functional Active
- Intense Moisturization
- Standardized for Essential Fatty Acids
- Perceivable Sensorial Attributes

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MATERIALS AND METHODS

The study was conducted using five participants. Each subject had their baseline photo taken prior to having their hair washed. The participant was also asked to complete a survey rating their hair prior to treatment on a scale of 1 to 10, with 1 being the lowest and 10 being the highest, using the following parameters cleansing, smoothing, dry and wet combability, anti-frizz, overall feel, shine and hydration.

Half of the head was treated with the control shampoo and conditioner while the other half of the head was treated with 2.0% **ABS Acai Sterols EFA** in the base shampoo and base conditioner. After the application and rinse of the test and positive control products, each participant's hair was blown dry using a round brush on both sides of the head. Once the hair was completely dry, the participant was asked to again assess the same parameters of both halves of their hair. Assessments were made using a rubric from 1 to 10, with 1 being the lowest and 10 being the highest.

RESULTS

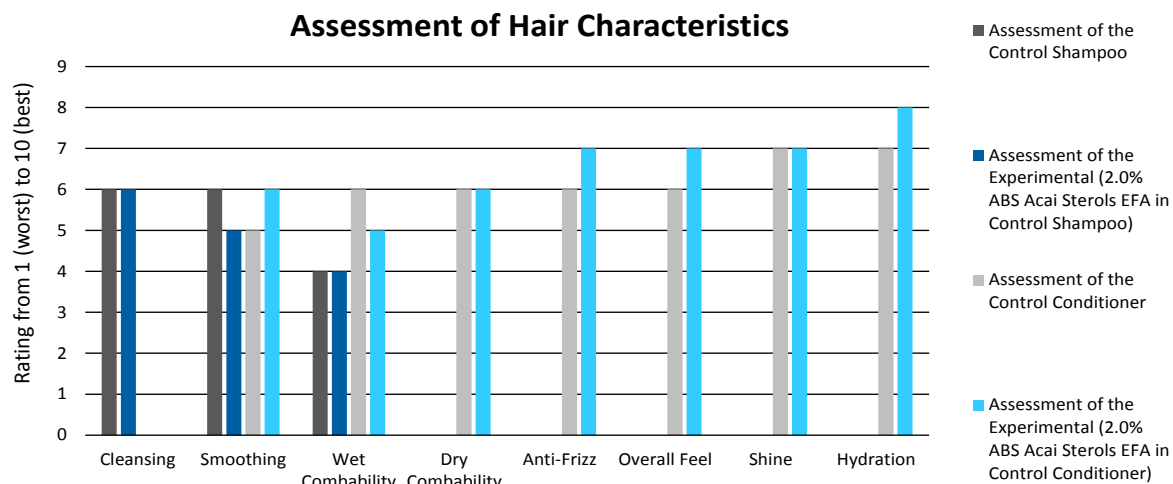
Parameters Tested	Assessment of the Control Shampoo	Assessment of the Experimental (2.0% ABS Acai Sterols EFA in Control Shampoo)	Assessment of the Control Conditioner	Assessment of the Experimental (2.0% ABS Acai Sterols EFA in Control Conditioner)
Cleansing	6.00	5.80	X	X
Smoothing	6.00	7.40	6.00	7.60
Wet Combability	5.20	6.60	5.60	7.60
Dry Combability	X	X	6.60	8.00
Anti-Frizz	X	X	6.00	9.00
Overall Feel	X	X	5.80	8.80
Shine	X	X	6.60	9.20
Hydration	X	X	6.40	9.20
Mean	5.73	6.60	6.14	8.48

Chart 1. Average Results for Participant's Sensory Assessment

Parameters Tested	Percent Difference – Comparison of Control Shampoo vs. Experimental (2.0% ABS Acai Sterols EFA in Control Shampoo)	Percent Difference – Comparison of Control Conditioner vs. Experimental (2.0% ABS Acai Sterols EFA in Control Conditioner)
Cleansing	0%	X
Smoothing	15%	29%
Wet Combability	33%	29%
Dry Combability	X	15%
Anti-Frizz	X	40%
Overall Feel	X	40%
Shine	X	25%
Hydration	X	40%
Mean	16%	31%

Chart 2. Percent Difference of Participant's Sensory Assessment

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Graph 1. Rating of hair characteristics following sensory assessment



Figure 1. Full head Baseline, Untreated Hair

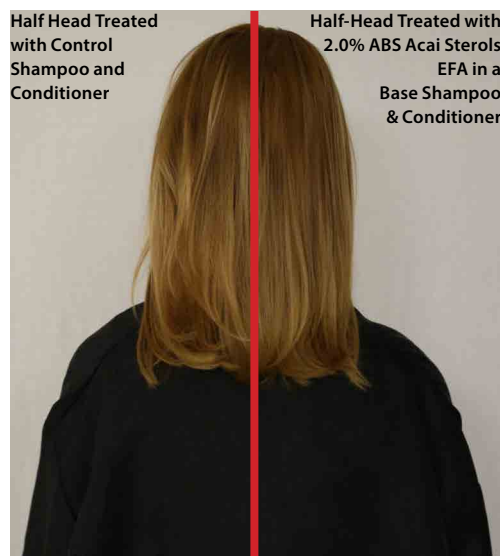


Figure 2. Half Head Treated



Figure 3. Full head Baseline, Untreated Hair



Figure 4. Half Head Treated

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Figure 5. Full head Baseline, Untreated Hair

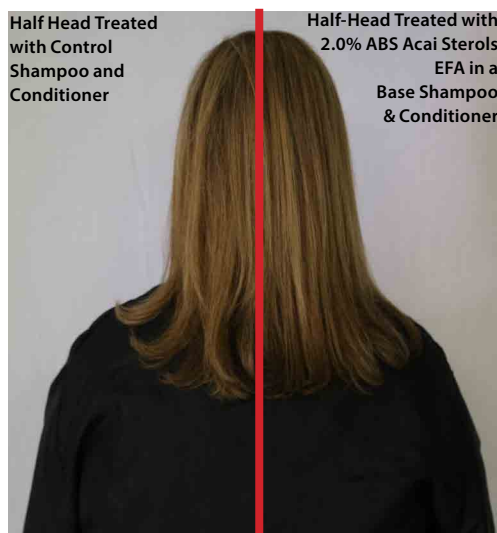


Figure 6. Half Head Treated



Figure 7. Full head Baseline, Untreated Hair

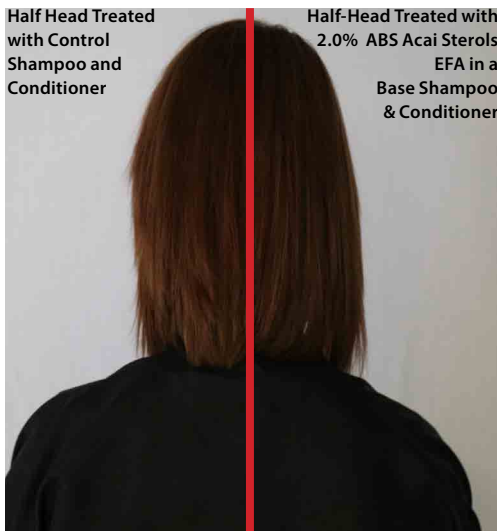


Figure 8. Half Head Treated



Figure 9. Full head Baseline, Untreated Hair



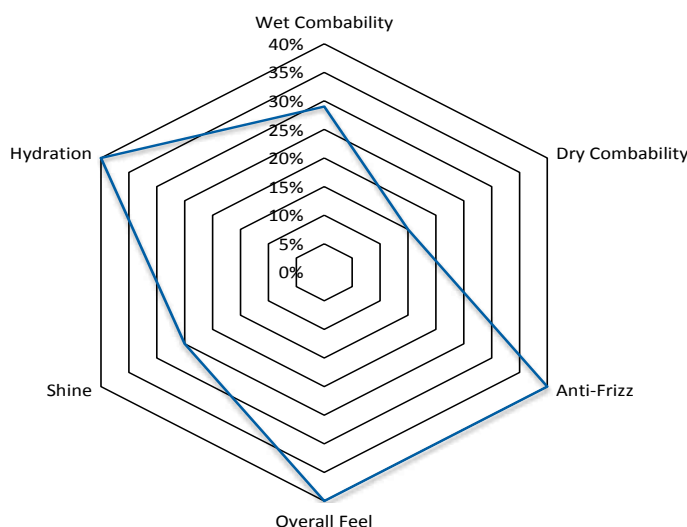
Figure 10. Half Head Treated

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When comparing hair characteristics of the baseline assessments to the post style assessments, the benefits of including 2.0% **ABS Acai Sterols EFA** in a conditioner are even more apparent. In relation to the baseline readings, the test-half of the head improved the intended subjective parameters, improving smoothing, anti-frizz, overall feel, shine and hydration by 29%, 40%, 40%, 25% and 40% ,respectively. It is clear from the images in this study that **ABS Acai Sterols EFA** helps create a smooth, sleek hairstyle. Additionally, in all images, the hair is less frizzy and has a more hydrated appearance.

The professional stylist who performed the actual tests by applying the product, styling the hair and documenting the images said **ABS Acai Sterols EFA** is great for smoothing frizzy, unruly hair. This product can tame the hair while enhancing the shine and overall feel of styled hair. The product is good for damaged and/or unruly hair. **ABS Acai Sterols EFA** can be used in a leave on application or conditioner for perceivable benefits.

Comparison of Control Conditioner vs. Experimental



Graph 2. Hair Assessment results for sensory characteristics

DISCUSSION

The results of the assessment indicate that when incorporated into a shampoo, 2.0% **ABS Acai Sterols EFA** did show improvement in the parameters tested. However, when used in a conditioner **ABS Acai Sterols EFA** is capable of improving smoothing, anti-frizz, overall feel, shine and hydration more than the control conditioner. These results can be further supported by figures 1 through 10, where clearly the half of the subject's head treated with 2.0% **ABS Acai Sterols EFA** appears shiny, smooth, less frizzy and hydrated. Additionally, the subjects reported a significant increase in hydration and overall feel of the hair.