

AC DermaPeptide MicroC PF Efficacy Data

Code: 20450PF
INCI Name: Saccharomyces/Capsicum Annuum Fruit Ferment Filtrate
CAS #: 84625-29-6
EINECS #: 283-403-6

Name of Study	Type of Study	Results
Circulation Assay	<i>In-vivo</i>	AC DermaPeptide MicroC PF is appears to effectively increase circulation compared to the control treatment of 1% Capsicum Annuum Extract. This confirms that the fermentation process creates a water-soluble, functionally active capsaicinoid capable of increasing circulation.
Chromameter Assay	<i>In-vivo</i>	Capillary circulation is often a side effect of tissue irritation. This study is intended to determine whether or AC DermaPeptide MicroC PF increases dermal circulation via an irritation pathway. The study confirmed that the topical application of this product does not produce any visible signs of erythema.



in-vivo AC DermaPeptide MicroC PF Circulation Analysis Assay

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

AC DermaPeptide MicroC PF Code: 20450PF

Abstract

AC DermaPeptide MicroC PF is created from a capsicum extract that is fermented with *Saccharomyces cerevisiae*. The process is intended to create a capsaicinoid fraction that not only functions like capsaicin to increase circulation, but also has increased solubility for use in aqueous systems.

Materials and Method

A Periscan PIM II Perfusion Laser Doppler Imaging system was used to non-invasively determine an increase in dermal circulation. A 5-subject panel consisting of 5 Caucasian females between the ages of 32 and 43 was assembled and provided with two aqueous solutions, one containing 1% **AC DermaPeptide MicroC PF** and the other containing 3% **AC DermaPeptide MicroC PF**.

To ensure accuracy, panelists abstained from using lotions, creams or any other cosmetic moisturizers on the test site for a period of three days prior to the initiation. The test area was located in the inner forearm region between the wrist and elbow. A gentian violet surgical skin marker and standard template delineated two 2 cm by 2 cm (4 cm²) test sites. Both AC DermaPeptide MicroC products were applied at a concentration of 2.0 mg/cm² for three consecutive days.

Results

	1% Capsicum Annuum Extract	1% AC DermaPeptide MicroC PF	3% Capsicum Annuum Extract	3% AC DermaPeptide MicroC PF
Mean Blood Flow	2322	2648	2322	3000.5
Percent Increase		28		43

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.



in-vivo AC DermaPeptide MicroC PF Circulation Analysis Assay

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

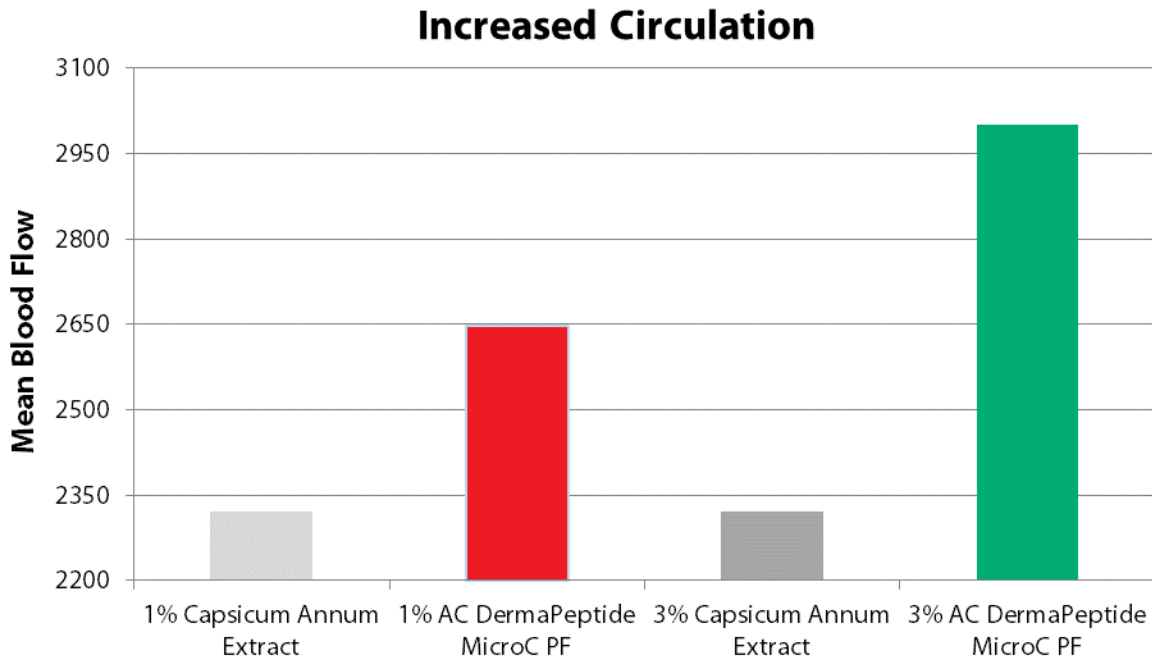


Figure 1: Improvements of blood flow after treatment with test materials.

Discussion

AC DermaPeptide MicroC PF appears to effectively increase circulation. The control treatment of 1% Capsicum Annum Extract did not effectively increase circulation because it does not contain capsaicin, which is insoluble in water. The results support the hypothesis that the fermentation process creates a water-soluble functionally active capsaicinoid capable of increasing circulation.

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.



in-vivo AC DermaPeptide MicroC PF Chromameter Assay

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

AC DermaPeptide MicroC PF Code: 20450PF

Abstract

AC DermaPeptide MicroC PF is a capsaicinoid that is designed to increase dermal circulation without causing visible erythema. Erythema is usually caused by irritation, which is often characterized by epidermal redness. Capillary circulation is often a side effect of tissue irritation, this study is intended determine whether or not **AC DermaPeptide MicroC PF** increases dermal circulation via an irritative pathway.

Materials and Method

A Minolta CR-200 Chromameter interfaced with a DP-100 Color Computer System was used to detect subtle changes in color based on hue, value and chroma represented by the color coordinates a^* , b^* and L^* respectively. There is an inverse relationship between the a^* value and the reddening of color. Therefore a decrease in the a^* value will indicate an increase in irritation. A 5-subject panel consisting of 5 Caucasian females between the ages of 32 and 43 was assembled and provided with a 3% **AC DermaPeptide MicroC PF** product.

To ensure accuracy, panelists abstained from using lotions, creams or any other cosmetic moisturizers on the test site for a period of three days prior to the initiation. The test area was located in the inner forearm region between the wrist and elbow. A gentian violet surgical skin marker and standard template delineated two 2 cm by 2 cm (4 cm²) test sites. 3% **AC DermaPeptide MicroC PF** products were applied at a concentration of 2.0 mg/cm² for three consecutive days. The reported results are relative to biological control.

Results

	Untreated a^* value	Treated a^* value
1	8.98	10.28
2	8.38	9.7
3	8.66	9.2
4	7.91	8.9
5	6.91	8.7

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.

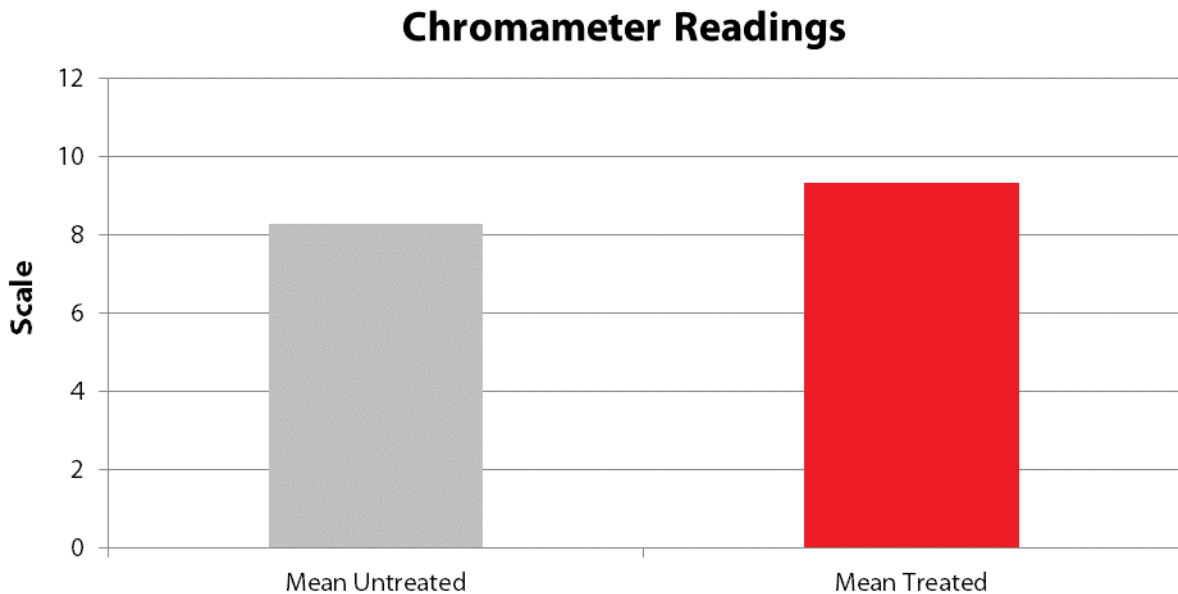


Figure 1: Color changes on the skin following application of AC DermaPeptide MicroC PF.

Discussion

The study confirms that the topical application does not produce any visible erythema. This observation in conjunction with the increase in microcirculation must lead one to infer that the underlining mechanism must be one other than irritation.