

AC Party Face Pom Increase in Collagen Type I Synthesis

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

Abstract

Collagen type I is a major component of the dermis that is responsible for providing structural support and elasticity to the skin. A series of *in vitro* tests were conducted within an amino acid deficient medium to determine the benefits of AC Party Face Pom at increasing fibroblast proliferation. Three concentrations were compared to a control, and the results were determined by an ELISA assay. Our findings indicate that AC Party Face Pom is capable of effectively increasing collagen production for anti-aging benefits.

Materials and Methods

Human fibroblasts were grown in a medium containing 10% fetal calf serum and inoculated at a concentration of approximately 6,000 cells per dish. They were incubated at 95% humidity and at 38°C for 24 hours. These cells were then removed and placed into an amino acid deficient medium which was supplemented with AC Party Face Pom at concentrations of 1%, 2%, and 4%. These samples were compared to a control that consisted of fibroblasts placed in an amino acid deficient medium without any additional supplementation. After 48 hours of incubation, .collagen I synthesis was determined by immunolabeling with primary and secondary antibodies (murine anti-collagen I monoclonal antibody and murine anti-IgG antibody) in a peroxidase/TMB substrate (3,3',5,5'-tetramethylbenzidine) visualization system.

Increase in collagen I synthesis is expressed by the following formula:

(Collagen Synthesis – Control) x 100 = % Increase in Collagen I Control

Results

Treatments	Collagen I (ng/ml)	Increase
Control	36	-
AC Party Face Pom 1%	57	51.4%
AC Party Face Pom 2%	77	102.7%
AC Party Face Pom 4%	89	137.8%

Table 1. Measurement of collagen synthesis activity of AC Party FacePom on fibroblasts.

Information contained in this technical literature is believed to be accurate and is offered in good faith for the benefit of the customer. The company, however, cannot assume any liability or risk involved in the use of its chemical products since the conditions of use are beyond our control. Statements concerning the possible use of our products are not intended as recommendations to use our products in the infrincement of any patent. We make no warranty of any kind, expressed or implied, other than that the material conforms to the apolicable standard specification.



AC Party Face Pom Increase in Collagen Type I Synthesis

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



Figure 1. Percent increase in collagen synthesis following treatment with AC Party Face Pom.

Discussion

Collagen I is a major component of the human dermis and provides structure and elasticity to the skin. According to the results, AC Party Face Pom is capable of significantly increasing collagen I synthesis at the 3 concentrations tested. The results were significantly higher than those showed by the control.

when used at 1%, 2% and 4%, AC Party Face Pom increased collagen synthesis by 51.4%, 102.7% and 157.1% respectively.

The results are clearly dose-dependent as treatment with a 4% concentration exhibited the greatest increase in collagen synthesis.. For this reason, AC Party Face Pom is perfectly suitable for cosmetic applications designed to boost collagen synthesis to help provide a younger and healthier looking complexion.

Information contained in this technical literature is believed to be accurate and is offered in good faith for the benefit of the customer. The company, however, cannot assume any liability or risk involved in the use of its chemical products since the conditions of use are beyond our control. Statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patent. We make no warranty of any kind. expressed or implied. other than that the material conforms to the applicable standard specification.