

AC Party Face Pom Cellular Proliferation Study

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

Abstract

The purpose of this study was to determine the Efficacy of AC Party Face Pom on cellular proliferation in a dose dependent fashion. Fibroblasts are responsible for producing components of the extracellular matrix which include both collagen and glycoproteins.

A series of *in vitro* studies were conducted within an amino acid deficient medium to determine the supplemental effects on fibroblast growth, thus compensating for nutritional deficiencies and determining the nutritional advantages of AC Party Face Pom. Three different use levels were compared to a positive and negative control, the results indicate that the product is effective in a dose dependent fashion.

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. After 24 hours, these cells were removed and placed into an amino acid deficient medium and supplemented with AC Party Face Pom at concentrations of 1%, 2%, and 4%. Two controls were cultured: one remained in a medium containing fetal calf serum, while the other was placed in an amino acid deficient medium with no supplementation. After 72 hours of incubation, proliferation was determined by staining and measuring absorbance at 550 nm.

Results

Treatments	Absorbance (nm)
Control (w/ FCS)	0.44
Control (depleted)	0.25
AC Party Face Pom0.5%	0.70
AC Party Face Pom 1%	0.85
AC Party Face Pom 2%	0.91
AC Party Face Pom 4%	0.98

Table 1. absorbance of fibroblasts treated with AC PartyFace Pom compared to the absorbance of the positive andnegative controls.

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 user of any taken to warrant vof any taken. We make no warrant vof any taken to war



AC Party Face Pom Cellular Proliferation Study

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



Increase in Fibroblast Proliferation

Discussion

There is a direct relationship between the absorbance and an increase in cellular proliferation. After 72 hours all cultures treated with AC Party Face Pom showed a significant increase in cellular proliferation compared to both controls. AC Party Face 4% showed the highest amount of cellular proliferation with an absorbance level of 0.97 nm. For this reason, this unique material is perfectly suitable for cosmetic and personal care applications were cellular renewal proliferation and repair benefits are desired.

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.

Figure 1. Improvements in fibroblast proliferation following treat with AC Party Face Pom compared to the controls.