

Phyto-Biotics Quercus Efficacy Data

Code: 16588
INCI Name: Quercus Alba Bark Extract
CAS #: 68917-11-3
EINECS #: 272-838-7

Type of Study	Results
Cellular Viability	Phyto-Biotics Quercus exhibited positive results by increasing cell metabolism. The increase in fluorescent signal indicates an increase in cellular metabolism and viability post Phyto-Biotics Quercus treatment.
High Resolution Ultrasound Skin Imaging Assay	As evidenced in a 4 week efficacy study of Phyto-Biotics Quercus, skin density showed a steady improvement over 4 weeks when compared to the untreated control and the base lotion. When compared to the base cream, Phyto-Biotics was more effective in improving skin density at the end of each test week. Results indicate that Phyto-Biotics Quercus is capable of consistently increasing collagen levels and skin density over time, in comparison to the base lotion which demonstrated lower or steady collagen levels each week in comparison to the initial reading.
IL-6 Elisa Assay	Phyto-Biotics Quercus exhibited anti-inflammatory effects on LPS-treated fibroblasts. As expected, the changes in IL-6 production using Phyto-Biotics Quercus appears to be dose dependent. This decrease in IL-6 production indicates a reduced inflammatory environment which could decrease the signs of aging and reduce the formation of fine lines and wrinkles.
Moisturizing Assay	As evidenced in a 4 week efficacy study of Phyto-Biotics Quercus on skin, moisture levels were improved by 17.63% after 24 hours and by 146.98% after 4 weeks when compared to the untreated control. Comparisons of the base lotion to the Experimental Lotion containing 2.0% Phyto-Biotics Quercus demonstrate the experimental material moisturized the skin 8.10% better after 24 hours. After two weeks the base lotion containing 2.0% Phyto-Biotics Quercus moisturized skin 44.69% better than the base lotion alone and was 29.30% more moisturizing than the base lotion after 4 weeks.

Type of Study	Results
ORAC Assay	Phyto-Biotics Quercus exhibited antioxidant activity comparable to 200µM Trolox®. The antioxidant capacity of Phyto-Biotics Quercus increased as the concentration increased, as a result we can assure that its ability to minimize oxidative stress is dose dependent.