



Cordyceps
Prebiotics



Improve
skin hypoxia



Collagen
Promotion



Brightening
& Firming

Bioyouth™-FCM

Cordyceps Militaris Ferment Filtrate

Cordyceps militaris is a well-known medicinal and edible fungus in China. It is rich in various active ingredients such as cordycepin, cordycepin acid, and cordyceps polysaccharide. It not only has oral health effects such as improving immunity and prolonging life, but also has antioxidant properties, firming, brightening, anti-aging and other skin care benefits. Bloomage Biotech research found that fermentation can not only fully release the active ingredients in Cordyceps militaris, but also convert macromolecular substances into easily absorbed small molecular substances, and at the same time generate new active ingredients, which greatly improves the skin care value of Cordyceps militaris.



69%

Cordycepin



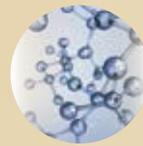
2659%

Cordyceps acid



330%

Cordyceps
polysaccharide



260%

17 Amino acids



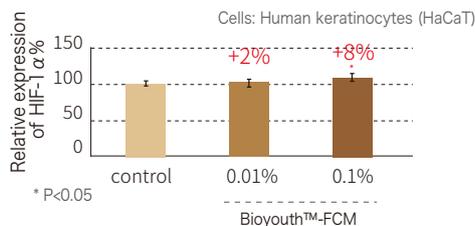
1.4 g/L

Lactic acid

Bioyouth™-FCM is based on the Bloomage Biotech's fermentation technology platform, using Cordyceps militaris as the substrate, and the active essence obtained by the fermentation of specific *Lactococcus*. Tests show that Bioyouth™-FCM can significantly promote the expression of HIF-1 α and improve skin aging problems such as collagen loss, pigmentation, and reduced skin elasticity caused by hypoxia.

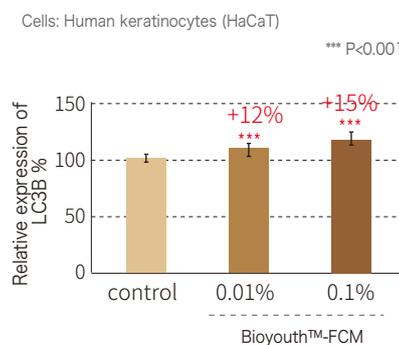
Mechanism of Action

Anti-hypoxia



HIF-1 α plays a role in regulating oxygen homeostasis during cellular hypoxia. Compared with control group, the expression of HIF-1 α was significantly increased by 8% with 0.1% Bioyouth™-FCM, thereby improving skin hypoxia and cell viability.

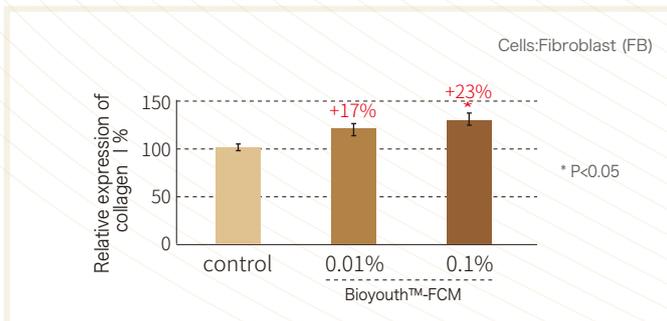
Activation of autophagy



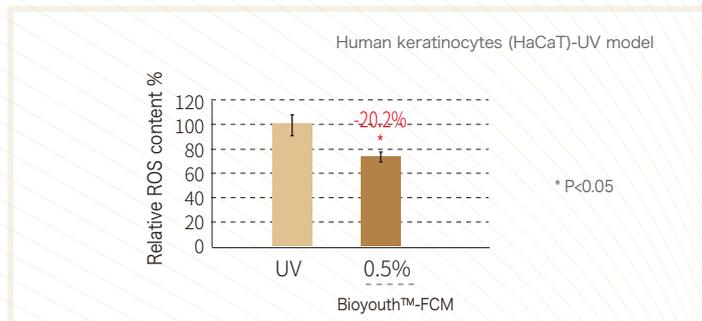
During autophagy, LC3B is involved in the formation of autophagosomes and it is an important marker protein for autophagy occurrence. 0.01% Bioyouth™-FCM up-regulated LC3B expression by 12% in cells. Thus it is indicated that Bioyouth™-FCM significantly improved cellular autophagy and promoted cellular repair and regeneration, then helping skin resist damage and aging.

Anti-aging Effects

Collagen Promotion—Promote collagen synthesis and ROS clearance rate

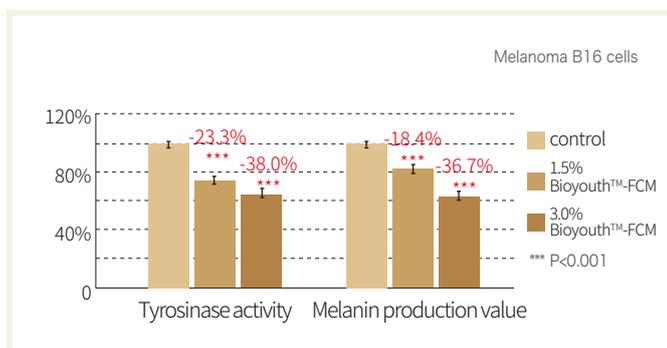


Collagen I is the most abundant collagen in human body. Compared with control group, Bioyouth™-FCM at 0.01% and 0.1% up-regulated collagen I expression by 17% and 23%, so as to make the skin elastic.

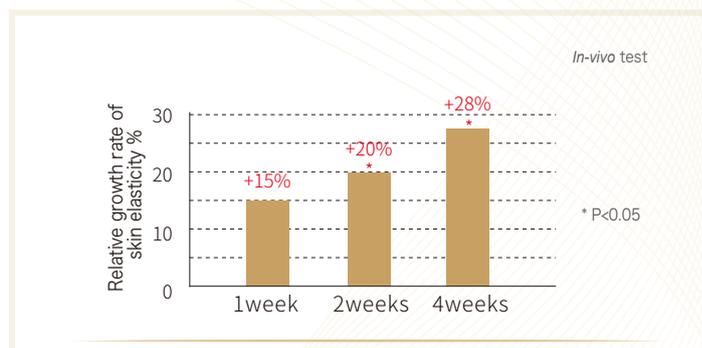


Excessive superoxide (ROS) is an important inducement of skin aging. Bioyouth™-FCM with 0.5% content could scavenge 20.2% ROS, indicating that it can reduce skin aging problems caused by ROS.

Brightening & Firming—Reduces melanin production, Improves skin elasticity



Bioyouth™-FCM with content of 1.5% and 3.0% significantly reduced tyrosinase activity and melanin production, it is suggested that Bioyouth™-FCM has a brightening effect on skin.



After using the serum containing 1% Bioyouth™-FCM for 4 weeks, the relative skin elasticity of the volunteers increased significantly by 28%, it is indicated that Bioyouth™-FCM helps skin to be firmer and younger.



Instructions

[INCI Name] Lactococcus Ferment, Cordyceps Militaris Extract, Pentylene Glycol

[Characters] Yellow to dark yellow, clear and transparent solution

[Suggested usage] 0.1%-3.0%

[Application] Creams, lotions, serums, masks and body care products with anti-aging properties



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CREATIVE TECHNOLOGY FOR VIBRANT LIFE

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