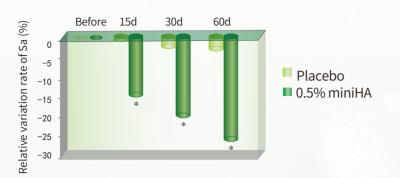
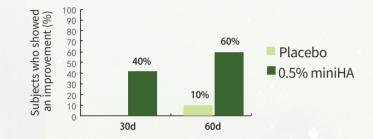
#### Reducing skin wrinkles

The skin wrinkle depth (Sa) decreased by 16.0%, 20.3% and 25.6% after applying miniHA cream for 15 days, 30 days and 60 days respectively.



#### **5** Clinical study



The wrinkle depth decrease was also confirmed by a dermatologist assessment after 30 days of application of a cream containing miniHA. 40% of the volunteers had obvious improvement of the wrinkle conditions. 60% of volunteers recorded obvious reduction of wrinkles depth after 60 days.

# Instructions

INCI name Hydrolyzed Sodium Hyaluronate

Recommended dosage 0.1~0.5%. Works better with common HA.

Solubility Good solubility in water.

#### Application

Anti-aging, repairing and moisturizing products, such as eye cream, mask, serum, sunblock cream, BB cream, lipstick, etc..

#### BLOOMAGE

CREATIVE TECHNOLOGY FOR VIBRANT LIFE

#### **BLOOMAGE BIOTECHNOLOGY CORPORATION LIMITED**

Add: No.678 Tianchen St., High-Tech Development Zone, Jinan, China 250101 Tel: +86 531 82685998 Fax: +86 531 82685988 www.bloomagebioactive.com E-mail: customer@bloomagebioactive.com Copyright © May. 2023, Bloomage Biotechnology





# miniHA<sup>TM</sup>

High Activity, Extremely Low Molecular Weight **Sodium Hyaluronate** 

- > Anti-aging



> Transdermal absorption > Deep moisturizing > Repairing damaged cells > Scavenging free radicals > Ecocert certified

www.bloomagebioactive.com

#### First HA-Oligo produced by patent enzymatic degradation technology

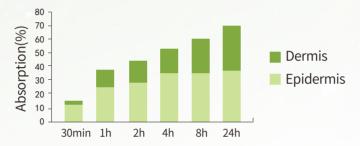


miniHA<sup>™</sup> with molecular weight 3k~10kDa produced by patent enzymatic degradation method with natural and moderate reaction conditions can penetrate into the skin and nourish the skin deeply. It has many biological activities, such as moisturizing, repairing, anti-oxidation, etc..

## **Mechanism of Action**

#### Transdermal absorption

Results of absorption capability on miniHA carried out by a third party laboratory using in-vitro reconstructed human skin show that, miniHA can penetrate into the skin with an absorption rate that can reach 36.2%, 60.7%, 69.5% after 1h, 8h, 24h respectively.



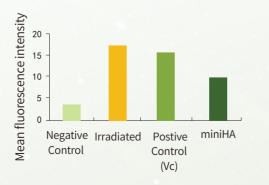
#### **2** Repairing damaged cells



miniHA can repair the skin cells damaged by ultraviolet irradiation, increase cellular activity and cellular proliferation.

## **B** Scavenging free radicals

miniHA can effectively scavenge Reactive Oxygen Free Radicals (ROS) induced by ultraviolet irradiation, so it can slow down the skin aging process by good anti-oxidation capability.

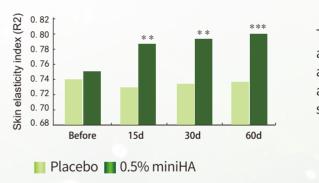


# **Efficacy in Cosmetics**

📕 Control 📕 0.2% miniHA

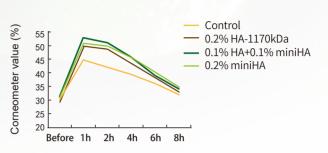
miniHA can penetrate into the skin, hydrating the epidermis and dermis. HA with high molecular weight has also good moisturizing capability by forming a film on the surface of skin. When miniHA and HA with high molecular weight are used in formulation together, a remarkable synergistic effect is observed.

## **2** Enhancing skin elasticity



#### **3** Strengthening the skin barrier





The skin elasticity increased by 4.6%, 5.2% and 6.1% after applying miniHA cream for 15 days, 30 days and 60 days respectively. By a long-term application, miniHA can significantly tighten the skin and increase its elasticity.

The skin thickness increased by 8.3% after applying miniHA cream for 60 days. By a long-term application, miniHA can strengthen the barrier function of the skin.