

HA Broccoli Exosome

BIOTECH EDGE

HA Broccoli Exosome is a nano-sized vesicle derived from broccoli, precisely loaded with hyaluronic acid using **advanced Digital Drug Delivery System (DDDS) technology**. This innovative platform ensures targeted, high-efficiency delivery of HA into skin cells, enhancing stability, penetration, and efficacy. The exosome carrier supports hydration, collagen synthesis, UV protection, skin rejuvenation, and cellular repair. **By combining plant-derived nanocarriers with HA**, this bioengineered system amplifies cosmeceutical performance while maintaining biocompatibility and skin-friendly properties.



PRODUCT DETAILS

INCI Name:

**Brassica Oleracea
Italica Vesicles,
Sodium Hyaluronate**

Exosome Particles:

**10 mg HA loaded
per 1×10^7 exosomes
(Purity - 95%)**

Appearance:

**Transparent
colourless
liquid**

APPLICATIONS :



Anti-aging and
rejuvenation serums



Hydrating and barrier
repair formulations



Skin brightening
treatments



Wound healing and
regenerative skincare



UV protection and
anti-fatigue formulations



High-tech cosmeceutical
delivery systems

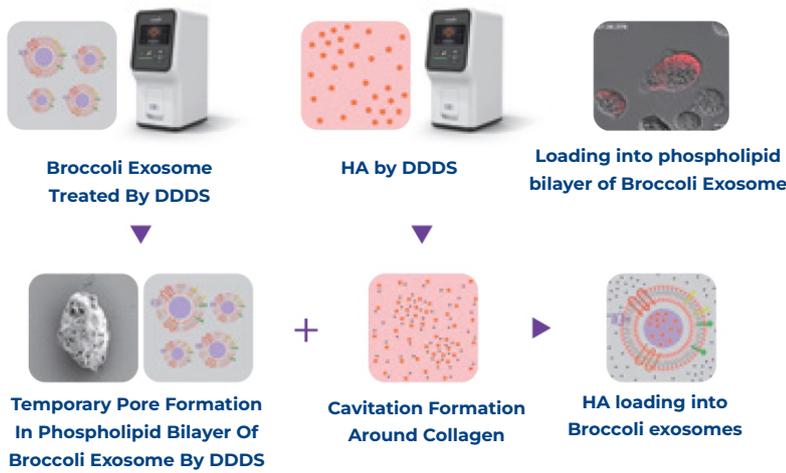
KEY FEATURES :

- High-efficiency HA delivery via broccoli-derived exosomes using DDDS digital loading
- Enhances cellular penetration and stability of HA
- Promotes collagen synthesis and dermal regeneration
- Provides UV protection and antioxidant support
- Supports skin barrier restoration and moisturization
- Anti-acne, brightening, and anti-aging properties

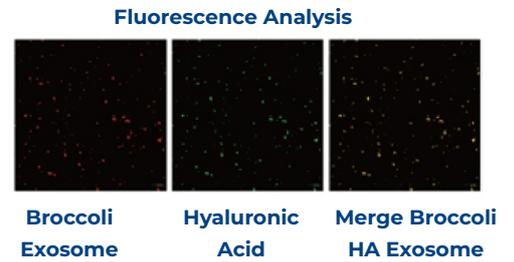
WHAT IT BRINGS TO YOUR FORMULATION :

- Next generation nanocarrier technology for enhanced efficacy
- Deep hydration and molecular-level skin repair
- Boosted bioavailability of hyaluronic acid
- Synergistic support for collagen production and skin resilience
- High-performance delivery for advanced cosmeceutical products

Principle Of Drug Loading Technology In Exosome By DDDS (Digital Drug Delivery System)

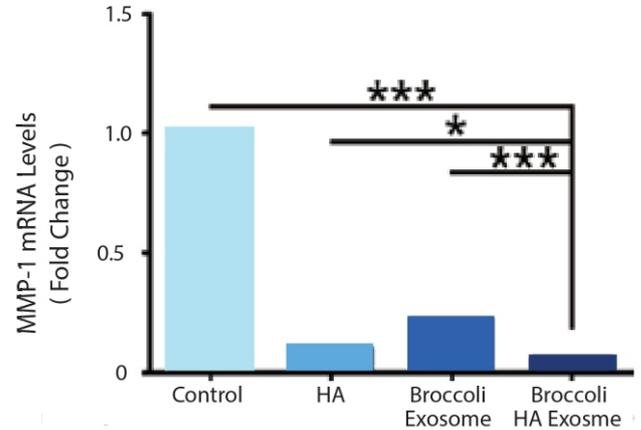
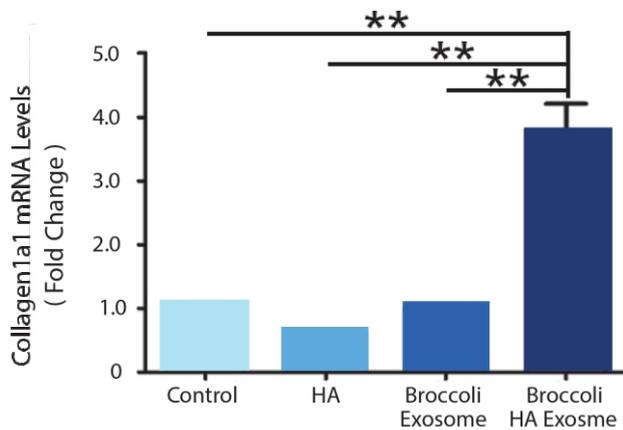


How To Verify Ha Loaded Broccoli Exosome?



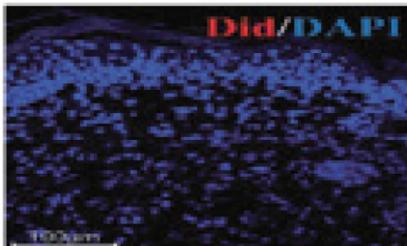
EFFICACY STUDIES :

Collagen Synthesis Effect Of Broccoli Ha Exosome



Skin Penetration of HA Broccoli Exosome

Before Treatment



1 min After Treatment



Penetration of HA Broccoli Exosome through (3 mm) skin tissue after topically applied on skin (HA Broccoli Exosomes are stained in red by DiD)

CLINICALLY PROVEN BENEFITS :

- Enhances skin hydration and barrier function
- Promotes collagen synthesis and supports ECM integrity
- Reduces fine lines and wrinkles while improving elasticity
- UV protection and antioxidant effects for skin resilience
- Supports wound healing and regeneration of damaged skin
- Brightens skin and improves overall texture