

LMW HA (0.1 – 0.5 MDa)

BIOTECH EDGE

Developed through **controlled enzymatic hydrolysis**, LMW Hyaluronic Acid embodies targeted biotech delivery that penetrates into deeper skin layers to activate cellular hydration and regeneration. This next-gen molecule enhances elasticity, supports collagen structure, and promotes skin renewal from within. A biotech evolution in deep hydration and repair.



Low Molecular Weight (LMW) HA is a next-generation hydrator that delivers moisture where the skin needs it most. With its smaller molecular size, it penetrates deeper in skin and engages directly with the skin's support system. Beyond hydration, it helps reinforce the extracellular matrix, enhancing texture, density, and visible bounce.

LMW HA exhibits biological activity regulating the skin's stress response, calming inflammation, and providing measurable antioxidant protection. Clinical studies confirm not only sustained hydration but also a progressive refinement in smoothness, resilience, and overall skin quality, establishing it as both a high-performance moisturizer and a functional active for renewal.

PRODUCT DETAILS

INCI name:
Sodium Hyaluronate

Recommended dosage:
0.05 – 0.5%

Appearance:
**White Or Almost White
Powder Or Granules**

APPLICATIONS :



Anti-aging serums &
lifting creams



Hydrating essences
& concentrates



Barrier-repair formulas
for dry/damaged skin



Restorative skin
treatments

KEY FEATURES :

- Non-GMO Microbial Fermentation Origin
- Non-Animal raw materials
- High purity profile suitable for cosmetic application
- Higher Glucuronic acid content
- Lower content of residual protein, nucleic acid, heavy metals and other impurities

WHAT IT BRINGS TO YOUR FORMULATION :

Delivers targeted hydration
into deeper skin layers

Provides anti-inflammatory
and soothing activity

Improves skin firmness
and smoothness

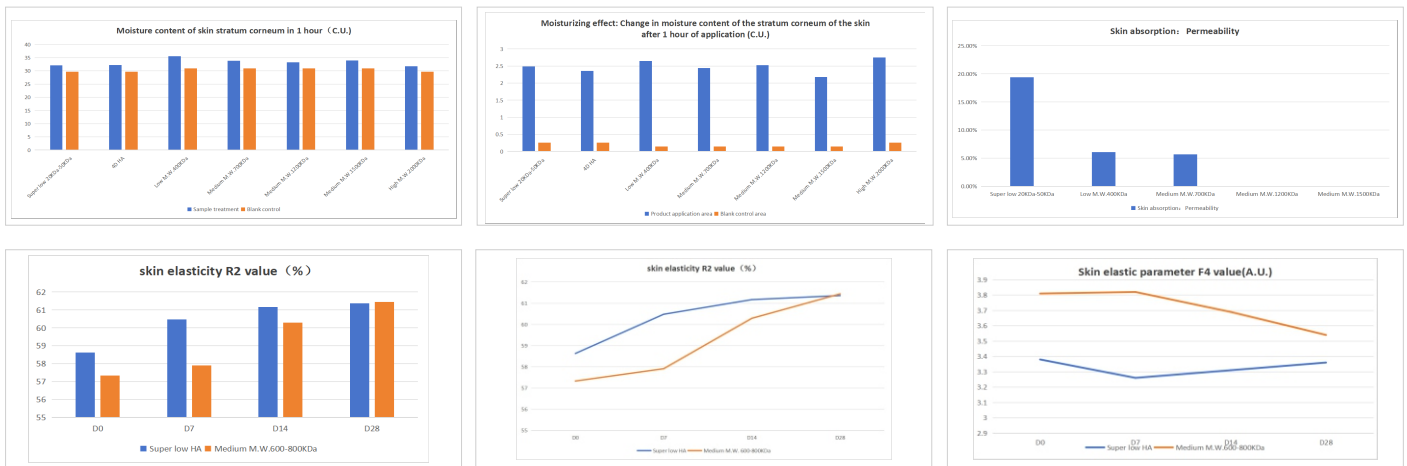
Pairs well with peptides,
ceramides, and antioxidants

EFFICACY STUDIES :

28-day study: Significant improvements in elasticity parameters

In-vitro: Suppressed IL-1 β & TNF- α expression (anti-inflammatory effect)

Confers antioxidant protection in in-vitro assays



Conclusion: Low molecular weight has good permeability. It can be faster and easier to be absorbed by skin.

Elastic parameter R2 value (%).The higher of the R2 value, the better the elasticity of the skin. The value of the elastic parameter F4 (A.U.).A smaller of the F4 value, the firmer of the skin.

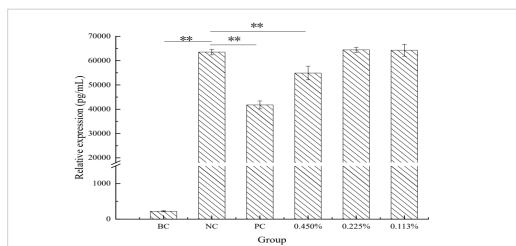


Figure 1 Effect of samples on LPS-stimulated TNF- α expression in human gingival fibroblasts** indicates P<0.01.

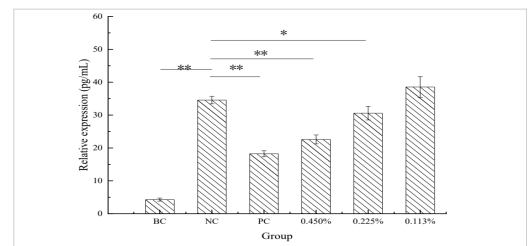


Figure 2 Effect of samples on IL-1 β expression in LPS-stimulated human gingival fibroblasts.

In conclusion, the samples had an anti-inflammatory effect of inhibiting the expression of inflammatory factors at the 0.450% concentration of the experimental design.

CLINICALLY PROVEN BENEFITS :

- Deep hydration into the epidermis
- Reduces fine lines & wrinkles
- Improves elasticity & firmness
- Provides soothing, anti-inflammatory care
- Strengthens skin resilience from within