



ElasticLabPN Booster™

Discover the Youth with PN

Welcome to the future of anti-aging skincare with our revolutionary **PN Booster**. This groundbreaking product combines cutting-edge ingredients to deliver unmatched results in rejuvenating and revitalizing your skin. Our unique blend of **polynucleotide, hyaluronic acid, adenosine, cyanocobalamin, and mannitol** works synergistically to transform your complexion, helping you rediscover your youthful radiance.

Prepare to experience the pinnacle of scientific innovation in beauty, as our Skin our Skin Booster harnesses the power of nature and advanced technology to combat technology to combat the signs of aging. Say goodbye to fine lines, wrinkles, and dull wrinkles, and dull skin, and hello to a smoother, firmer, and more luminous you. luminous you.



by ELASTIC LAB INC.

new

Elastic
Lab

Experience Elasticlab's new
era of skin rejuvenation



PN
Booster

What is Polynucleotide?

Polynucleotide, emerging as a regenerative bio-stimulator in medical industry

Definition

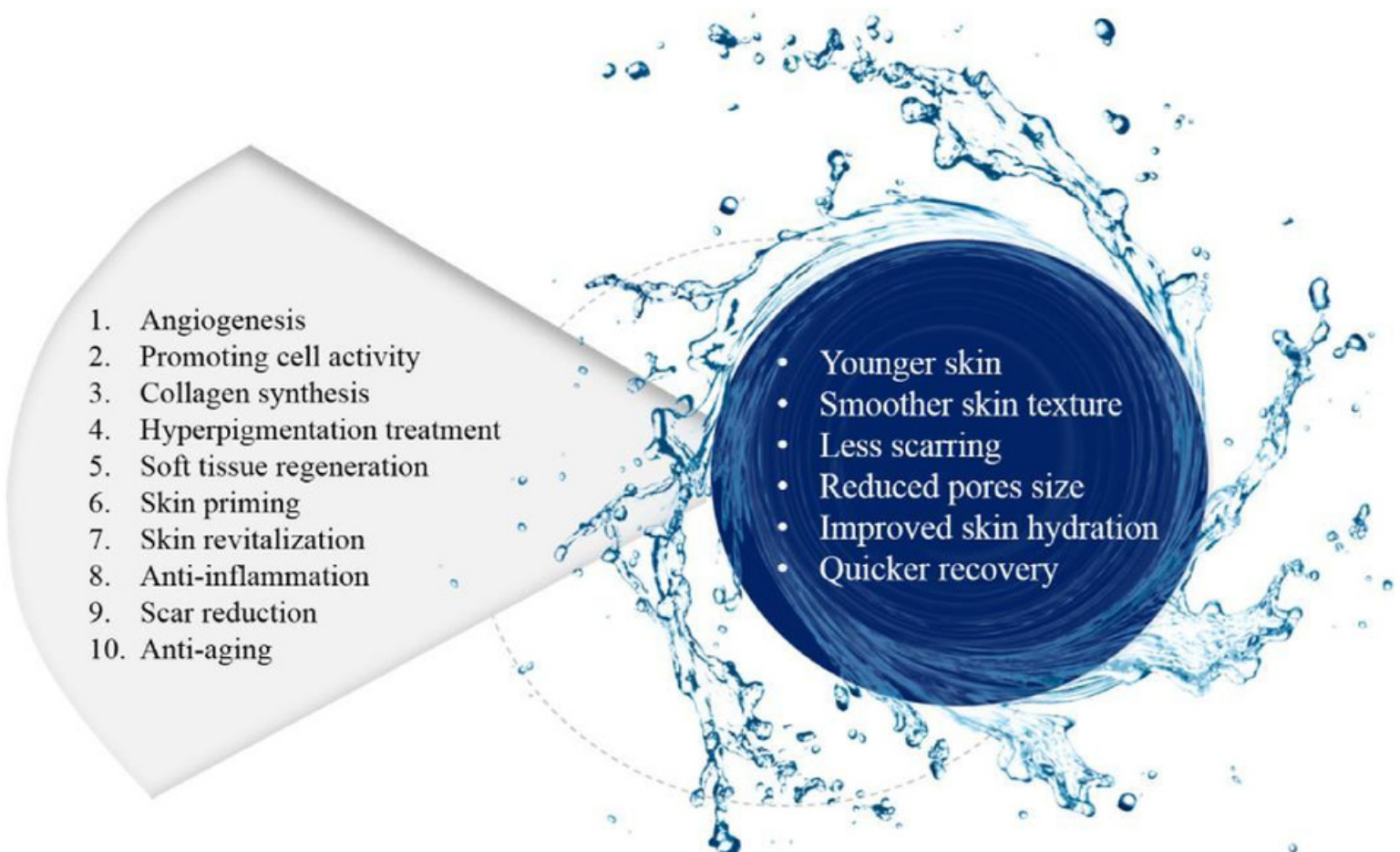
- Polymers consisting of deoxyribonucleotides.
- Long chain DNA fragments
- High molecular weight > 100kDa

Source

Primarily derived from fish, such as trout, salmon, sturgeon gonads.

Mode of Action

- Thanks to viscoelastic property, PN provide structural support of tissue.
- Improving physiological conditions for cell growth.
- Stimulating cellular components like fibroblasts, promoting skin regeneration

- 
1. Angiogenesis
 2. Promoting cell activity
 3. Collagen synthesis
 4. Hyperpigmentation treatment
 5. Soft tissue regeneration
 6. Skin priming
 7. Skin revitalization
 8. Anti-inflammation
 9. Scar reduction
 10. Anti-aging

- Younger skin
- Smoother skin texture
- Less scarring
- Reduced pores size
- Improved skin hydration
- Quicker recovery



The Magic of PN(Polynucleotide), Star Ingredient

1

Skin Rejuvenation

PN improves skin hydration, elasticity, and overall texture. Clinical trials, such as the one conducted by Kim et al. (2015), demonstrated significant enhancements in skin firmness and tone due to the stimulation of collagen and elastin production (The PMFA Journal). Additionally, PNs protect against oxidative stress-induced skin damage, helping to maintain a youthful appearance (The PMFA Journal).

2

Scar Treatment

PNs have been effective in reducing the appearance of scars. For instance, Lee et al. (2018) found that PN injections significantly improved the appearance of acne scars by promoting the growth of new skin cells and tissue repair (The PMFA Journal). They also enhance wound healing by promoting collagen synthesis and increasing blood vessel formation (The PMFA Journal).

3

Wrinkle Reduction

In a comparative study, a hyaluronic acid-polynucleotide composite dermal filler effectively reduced crow's feet wrinkles, demonstrating its potential as a regenerative filler (Springer). Another study noted that PN injections reduced the activity of matrix metalloproteinase-1 (MMP-1), an enzyme that breaks down collagen, thereby helping to maintain skin integrity and reduce wrinkle formation (Springer).

4

Melanin Reduction

PNs also have properties that inhibit melanin biosynthesis, which can help in the treatment of hyperpigmentation and melasma, contributing to a more even skin tone (Springer).

Hyaluronic Acid (HA)

| Skin Benefits and Mechanisms

- **Superior Hydration:**

HA is a naturally occurring polysaccharide in skin that can bind up to 1000 times its weight in water, providing profound hydration essential for maintaining skin moisture and suppleness.

- **Improves Skin Elasticity and Texture:**

By maintaining optimal hydration levels, HA helps plump the skin, reducing the appearance of fine lines and wrinkles and improving overall skin texture and smoothness.

- **Strengthens Skin Barrier Function:**

HA reduces transepidermal water loss (TEWL), reinforcing the skin's natural barrier to protect against environmental damage and prevent moisture loss, contributing to healthier skin.

- **Enhances Skin Repair and Renewal:**

HA supports the regeneration of the extracellular matrix, accelerating wound healing and promoting youthful skin appearance.

- **Safe and Well-Tolerated:**

Extensive clinical use demonstrates that HA is biocompatible, non-immunogenic, and widely safe for cosmetic and dermatological use.

References

- Bravo et al., "Benefits of topical hyaluronic acid for skin quality and signs of skin aging: From literature review to clinical evidence," *Dermatol Ther*, 2022.
- Pavicic et al., "Efficacy of cream-based formulations of hyaluronic acid of different molecular weights in anti-wrinkle treatment," *J Drugs Dermatol*, 2011.



Synergistic Efficacy of PN + HA Combination

- The combination of PN + HA provides a "double reaction" synergistic effect that enhances skin barrier recovery, hydration, and anti-inflammatory response more than either alone.
- Clinical metrics reveal:
 - 52% reduction in transepidermal water loss (TEWL), indicating faster skin barrier repair.
 - 77% reduction in inflammatory cells (neutrophils), emphasizing strong anti-inflammatory action.
 - 100% increase in filaggrin expression, a critical protein for maintaining skin barrier integrity.
 - 54% reduction in skin damage score, showing significant improvement in skin health.

This synergy accelerates skin healing and revitalization, delivering visible improvement in skin texture and resilience.

References

-Haetal., "The Effect of Polynucleotide-Hyaluronic Acid Hydrogel in the Recovery After Mechanical Skin Barrier Disruption," Skin Research and Technology, 2024



Adenosine: Your Skin's Wrinkle Warrior

Adenosine exerts its skin-rejuvenating, anti-inflammatory, and wound-healing effects primarily through activation of the **A2A receptor**, which triggers the **cAMP/PKA signaling pathway**. This mechanism is **identical to the main pharmacological pathway of PDRN (Polydeoxyribonucleotide)**, which also acts via A2A receptor activation to promote tissue repair and collagen synthesis.

However, **adenosine acts more rapidly and with greater potency** because it is a **direct receptor agonist**, whereas PDRN induces adenosine release indirectly through nucleotide metabolism. As a result, adenosine produces **faster stimulation of fibroblast activity, stronger induction of collagen and elastin synthesis, and more immediate anti-inflammatory responses**, making it a highly effective bioactive molecule for **skin regeneration and elasticity improvement**.

1

Collagen Boost

Adenosine has been shown to bind to A2A receptors in dermal fibroblasts, stimulating collagen production. This leads to increased skin elasticity and a reduction in wrinkle depth. A study published in the International Journal of Cosmetic Science found that adenosine-containing products significantly improved the appearance of wrinkles and skin smoothness after two months of use.

2

Anti-Inflammatory Properties:

Adenosine inhibits the inflammatory effects of white blood cells, which helps reduce redness and irritation. This makes it beneficial for soothing sensitive skin and treating conditions like eczema. A study published in Experimental Dermatology highlighted adenosine's ability to suppress inflammatory cytokine production, further supporting its role in reducing skin inflammation.

3

Wound Healing

Adenosine promotes wound healing by enhancing collagen synthesis and accelerating tissue repair. A study on wound healing showed that adenosine-treated wounds healed faster compared to untreated wounds, highlighting its potential in skin repair treatments. The ability of adenosine to stimulate collagen production also aids in the repair and maintenance of the skin's structural integrity, making it a valuable ingredient for restorative skincare (Dr.TWLSkin) (Those Graces).

Cyanocobalamin: The Radiance-Boosting Vitamin B12

Cyanocobalamin is a synthetic form of vitamin B12, an essential nutrient that plays a vital role in skin health. It aids in cell regeneration, wound healing, and maintaining skin's overall vitality.

Accelerates Skin Repair

Cyanocobalamin speeds up the healing process by promoting cell proliferation and migration. Supports tissue repair, leading to smoother, healthier skin.

Hydration Boost

Enhances skin hydration, making it ideal for dry or sensitive skin types. Improves the skin's barrier function, protecting it from environmental stressors.

Tone and Texture

Helps manage acne by reducing inflammation and regulating oil production. Leads to clearer skin and less severe acne symptoms.



Mannitol: Nature's Hydration Powerhouse

Mannitol is a type of sugar alcohol that is used in various medical, pharmaceutical, and food applications.

Deep Hydration

Mannitol, a naturally occurring sugar alcohol, excels at retaining moisture in the skin. It creates a protective barrier that locks in hydration, keeping your skin plump and supple throughout the day.

Antioxidant Protection

Acting as a powerful antioxidant, mannitol shields your skin from free radical damage and environmental stressors. This protection helps prevent premature aging and maintains your skin's youthful appearance.

Protection Against UV Damage

Mannitol provides a protective effect against UV-induced damage, reducing the harmful impact of UV radiation on the skin.

Enhanced Resilience

By improving your skin's moisture balance, mannitol enhances its natural resilience. This leads to stronger, healthier skin that's better equipped to withstand daily stressors and maintain its youthful qualities.

Benefits of **PN Skin Booster**



Youthful Radiance

Experience a revitalized and brightened skin tone, restoring your natural, youthful glow. Our Skin Booster illuminates your complexion from within, giving you a luminous appearance that turns heads.



Wrinkle Reduction

Say goodbye to fine lines and wrinkles as our powerful formula works to smooth and plump your skin. Restore your skin's firmness and elasticity, visibly reducing the appearance of age-related imperfections.



Deep Hydration

Enjoy long-lasting moisture that penetrates deep into your skin layers. Our Skin Booster provides intense hydration, resulting in a plump, supple complexion that looks and feels refreshed all day long.



Enhanced Protection

Shield your skin from environmental damage and oxidative stress with our potent antioxidant blend. Build your skin's resilience against daily aggressors and maintain its youthful vitality.



Applications



Skin Rejuvenation

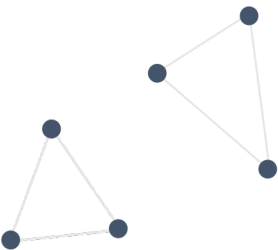
Skin Texture

Fine line

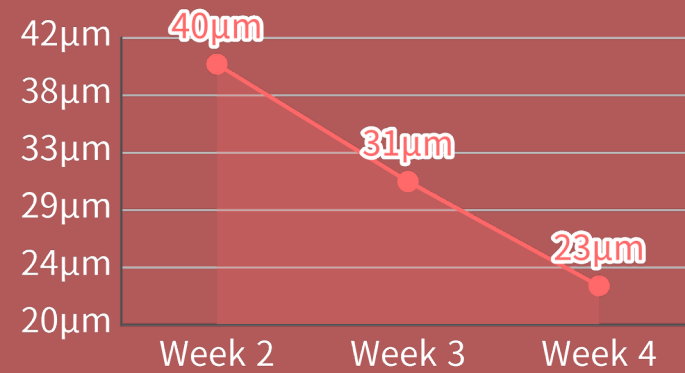
Scar Treatment

Dry skin

Dull Skin tone

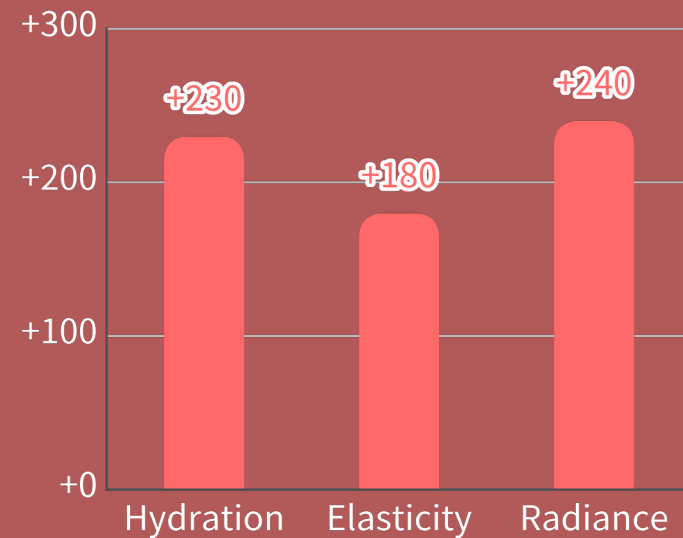


01 ■ Visible Wrinkle Reduction with PN



● Fine line and wrinkle reduction

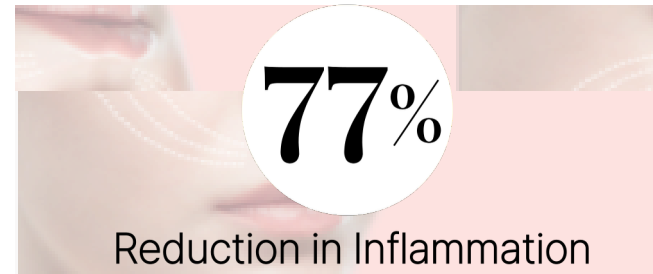
02 ■ HA for Radiant, Supple Skin



1) "Polynucleotides in Aesthetic Medicine: A Review of Current Applications," PMC ID: PMC8261219 (2024)

2) Bravo et al., "Benefits of topical hyaluronic acid for skin quality and signs of skin aging: From literature review to clinical evidence," Dermatol Ther. 2022.

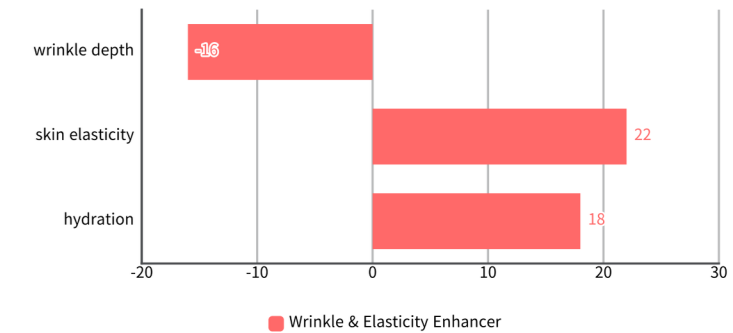
■ Double Synergy, PN + HA



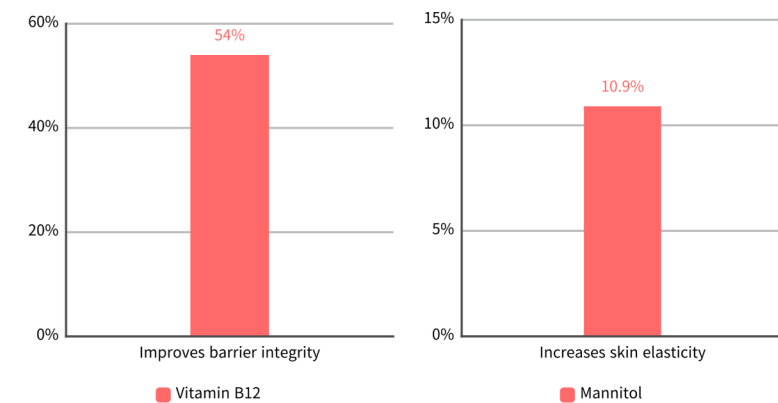
1) Ha et al., "The Effect of Polynucleotide-Hyaluronic Acid Hydrogel in the Recovery After Mechanical Skin Barrier Disruption," Skin Research and Technology, 2024

■ Advanced Multi-Active Ingredients

Adenosine¹⁾ | Wrinkle & Elasticity Enhancer



Vitamin B12²⁾ & Mannitol³⁾ | Barrier Repair & Hydration Booster



1) Kim et al., "Evaluation of anti-wrinkle efficacy of adenosine-containing products," J Dermatol Sci, 2006

2) Wananukul et al., "Topical vitamin B12 as a therapeutic approach in atopic dermatitis," J Dermatol Treat, 2004

3) Kwon et al., "Free radical scavenging properties of mannitol in skin," Oxid Med Cell Longev, 2017

NEW
PN Booster
The Evolution of Regeneration



Elastic Lab

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