

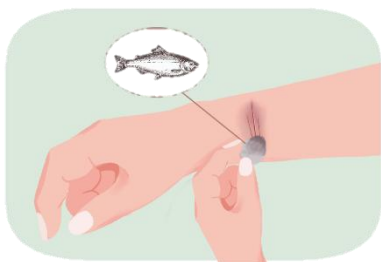
PDRN

Repair & Anti-aging



PDRN

PDRN (polydeoxyribonucleotide) is a mixture of deoxyribonucleotides derived from a controlled purification process of Salmon Trout or Chum Salmon sperm DNA which makes sure its safety and stability. PDRN activates the adenosine A_{2A} receptors and generates nucleotides that can contribute to DNA formation, thus having a tissue repairing, wound healing and anti-aging effect. Therefore, it is widely used in mesotherapy & dermal fillers.



Apply salmon seminal vesicles on the wound surface

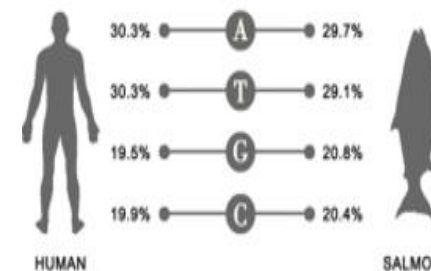


Rapid wound healing

The beneficial effects of Polydeoxyribonucleotide (PDRN) was first found by Italy fishermen. Apply the salmon seminal vesicles containing PDRN on the wound surface, resulted in rapid wound healing.

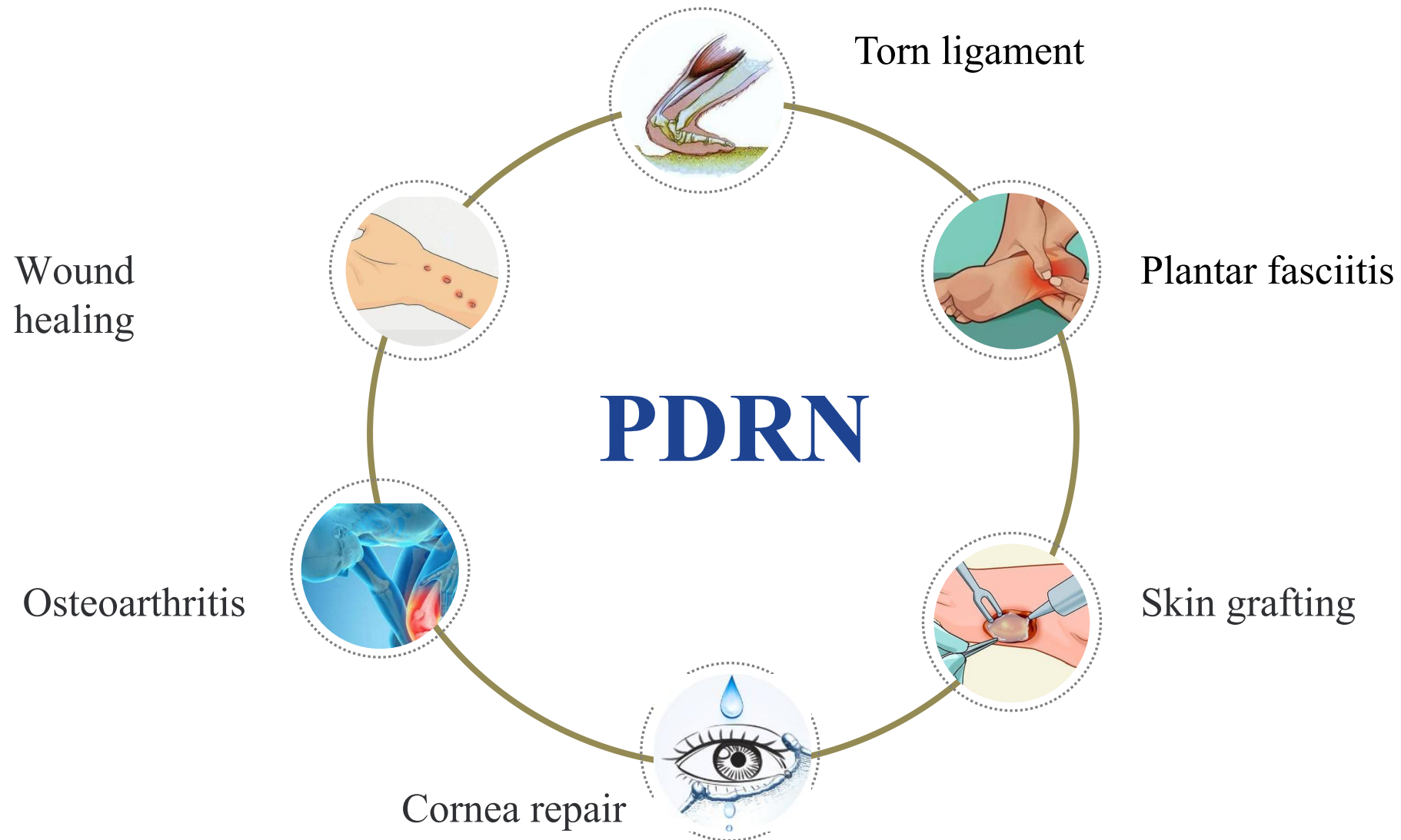


Chemical Structure of PDRN



98% identical to human DNA

Proven Effective Applications of PDRN





Product name	INCI Name	Recommended usage	Applications
Polydeoxyribonucleotide (PDRN)	Sodium DNA	0.1%-2%	Mesotherapy and dermal-filler

BloomseaN™
PDRN Polydeoxyribonucleotide
Repair & Anti-aging

Application

- Mesotherapy
- Dermal Filler
- Topical Use
- Personal Care
- Eye Drops



Salmon Trout Gonads



DNA extraction



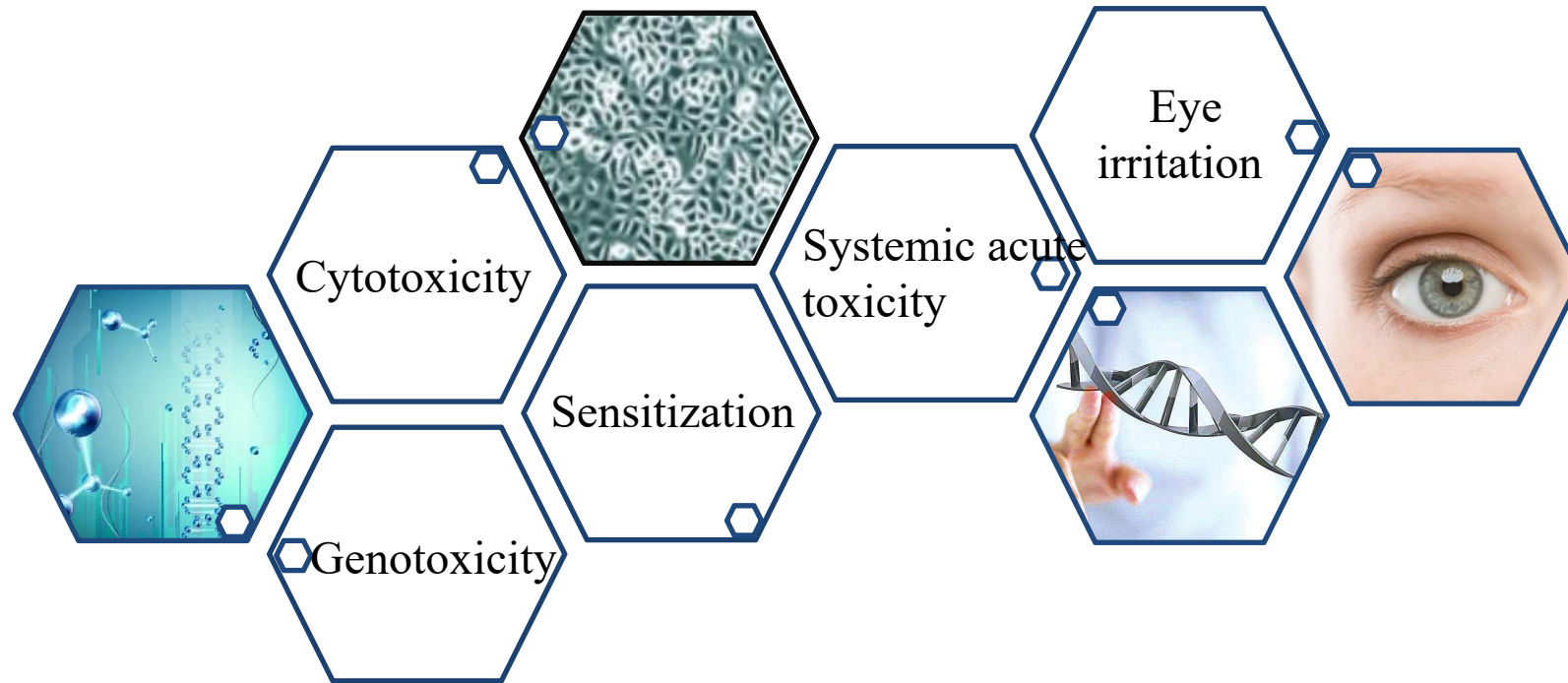
Optimize DNA



PDRN

Safety Evaluations

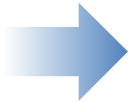
According to the requirements of ISO10993-5:2009/GB/T 16886.5-2017, the safety of BloomseaN™ PDRN raw materials is proved.



PDRN—Anti-aging and Repair



PDRN



Promote the growth of human fibroblasts

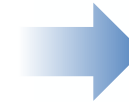
Enhance collagen regeneration

Suppress cellular oxidative stress in skin cells

Minimizing inflammation

**Repair ultraviolet B (UVB)-
damaged dermal fibroblasts**

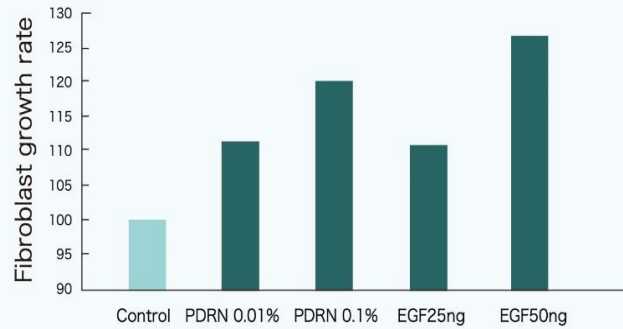
Wound Healing



Skin Regenerative Repair

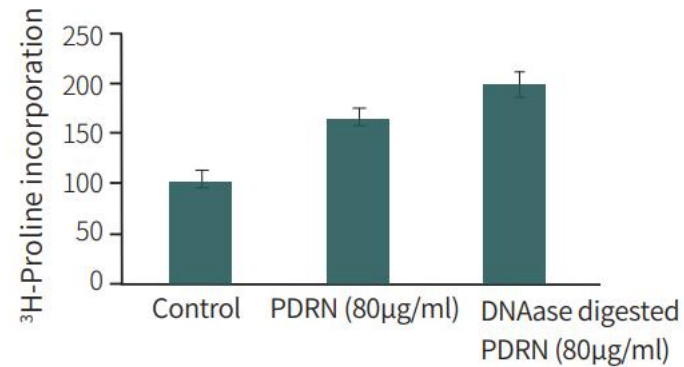
Anti-aging—Cell Regeneration, Anti-oxidation

【Promoting fibroblast growth】



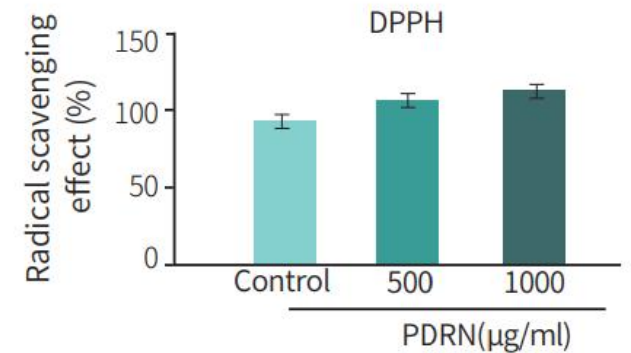
Test shows: PDRN promotes the growth of human fibroblasts.

【Effect of polydeoxyribonucleotides (PDRN) on the incorporation of [³H]-proline into the proteins secreted by cultured fibroblasts】



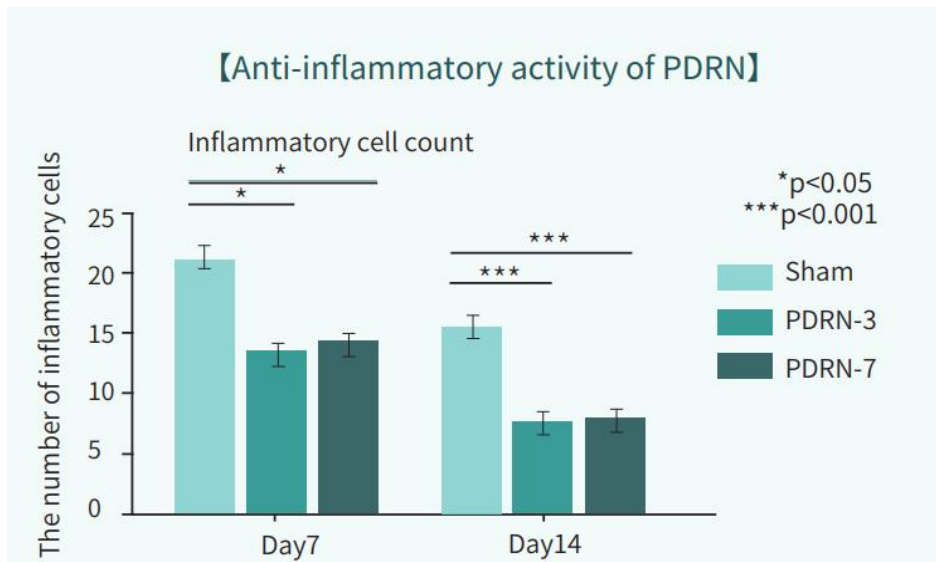
Proline is one of the most highly represented amino acids in collagen. The cells cultured in the presence of PDRN enhance collagen synthesis and secretion into the medium.

【Antioxidative activity of PDRN】

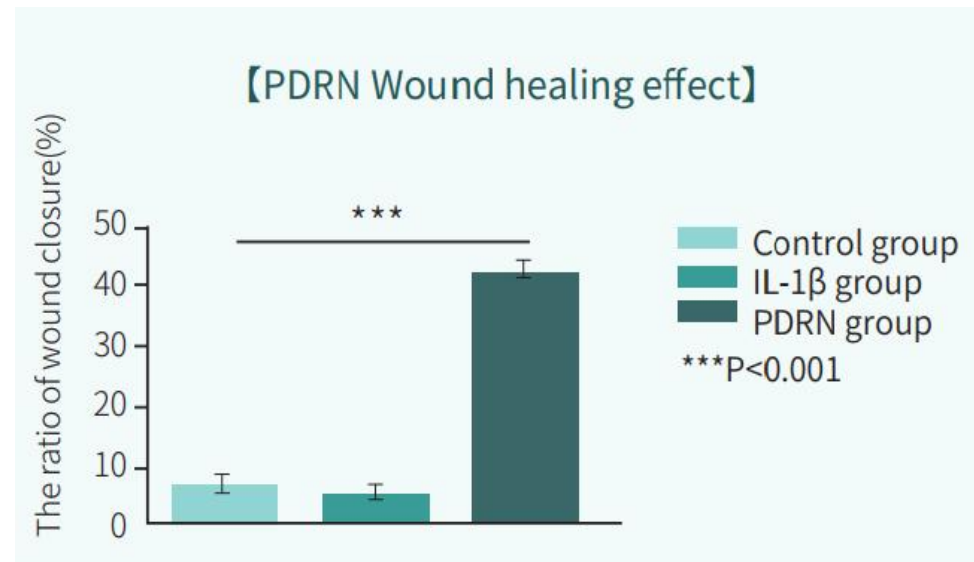


Antioxidative activity was assessed by DPPH assay. PDRN showed antioxidant activities in a dose-dependent manner, and those activities can suppress cellular oxidative stress in skin cells.

Repair—Anti-inflammatory, Wound Healing



PDRN can effectively decrease the inflammatory cell counts, indicating its anti-inflammatory effect.



In the in vitro scratch assay, a significant increase in percentage of wound closure was observed in the PDRN group compared with either the control group or the IL-1 β group, suggesting PDRN repairing effect on wound healing.