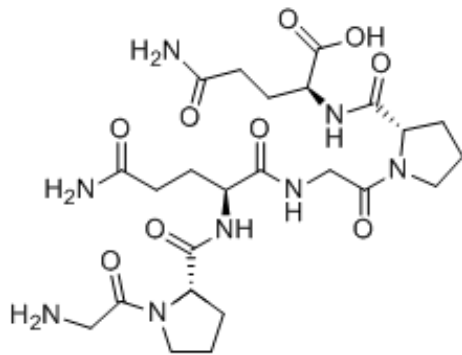


WP-HP9

(Hexapeptide-9 based on Purified water)



Characterization

- Based on purified water
- Hexapeptide-9 promotes synthesis of skin collagen, regeneration of skin epidermal junctions and skin differentiation
- Hexapeptide-9 has considerable effects that reduce wrinkle and restore skin
- Hexapeptide-9 is synthesis peptide containing glutamine, glycine and proline residues.

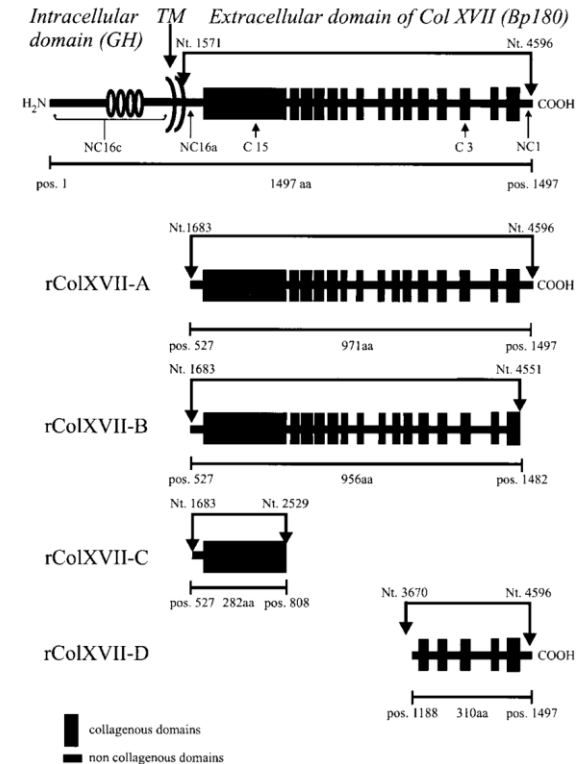
Action Mechanism

→ Action mechanism of Hexapeptide-9

- The sequence of hexapeptide-9 is a sequence found in human collagen XVII which is dermal epidermal junction(DEJ) collagen.
- Skin damage results in enzymatic degradation of skin components and liberates many different biofunctional peptide.
- Among these naturally occurring fragments, short active collagen peptide, such as hexapeptide-9 derived from collagen XVII fragment, stimulates new extracellular matrix protein synthesis and skin restoration
- Hexapeptide-9 uniquely regenerate both epidermis and dermis

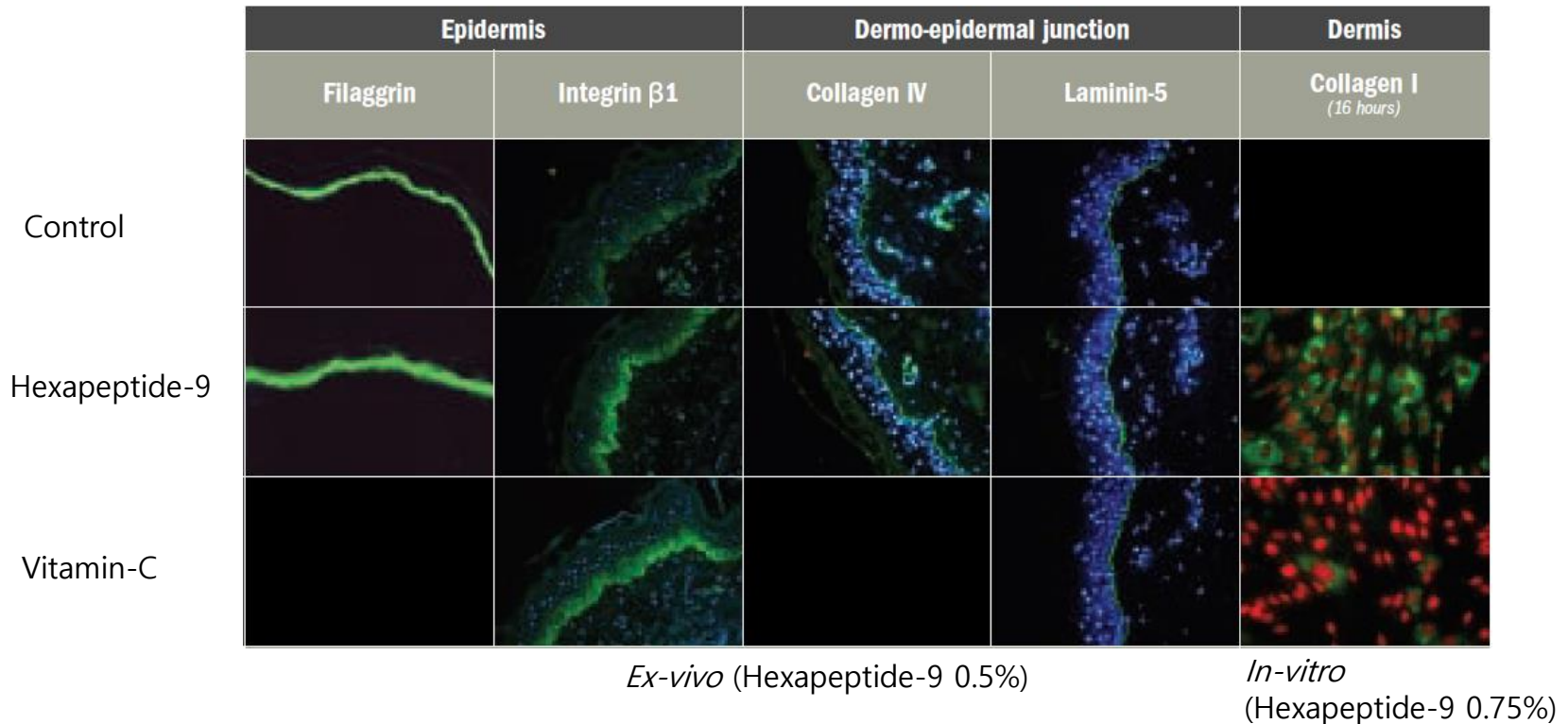
Efficacy and effectiveness of Hexapeptide-9

- ❖ Reduces wrinkle rapidly
- ❖ Improves epidermis restoration
- ❖ Improves skin protein synthesis(collagen type I and III)
- ❖ Improves skin epidermal junction structure(laminin-5, integrin, collagen IV)
- ❖ Stimulates epidermal differentiation markers(keratin, filaggrin)



Efficacy – Clinical Trial

→ In-vitro and ex-vivo efficacy; Skin regeneration

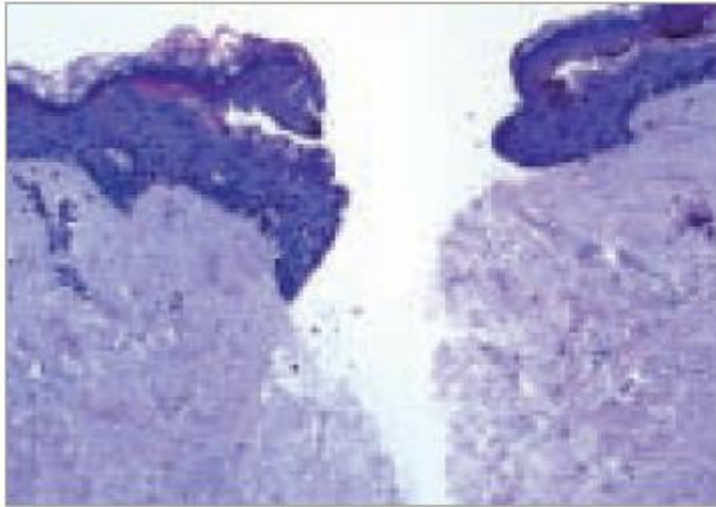


- ❖ At the skin level Hexapeptide-9 rapidly induced increase expression of collagen I and III (data not shown)
- ❖ This peptide promotes synthesis of collagen IV and laminin-5 in DEJ
- ❖ Confirmed improvement in some epidermal differentiation marker (filaggrin, keratin)
- ❖ Every result showed bigger effect than vitamin c

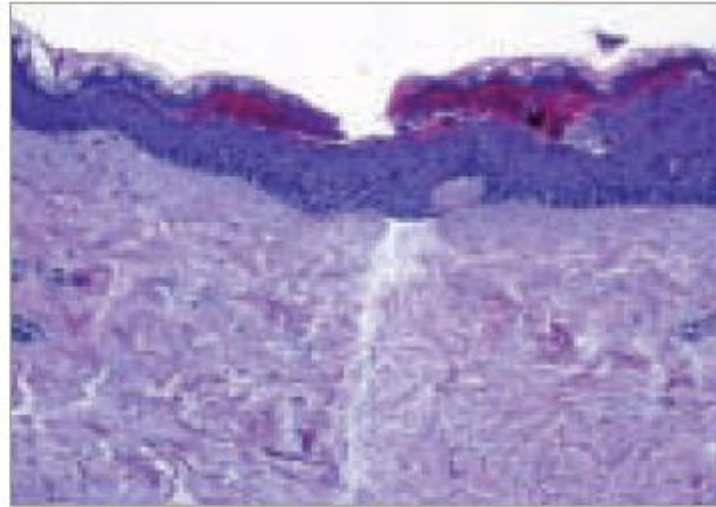
Efficacy – Clinical Trial

→ Ex-vivo Efficacy; Tissue repair

Untreated Skin



0.5% Hexapeptide-9

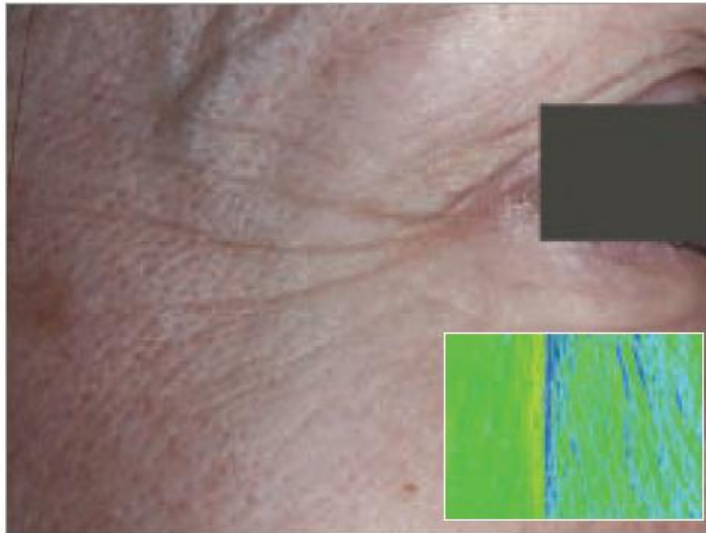


❖ Hexapeptide-9 promotes complete and rapid epidermal regeneration with excellent skin restoration.

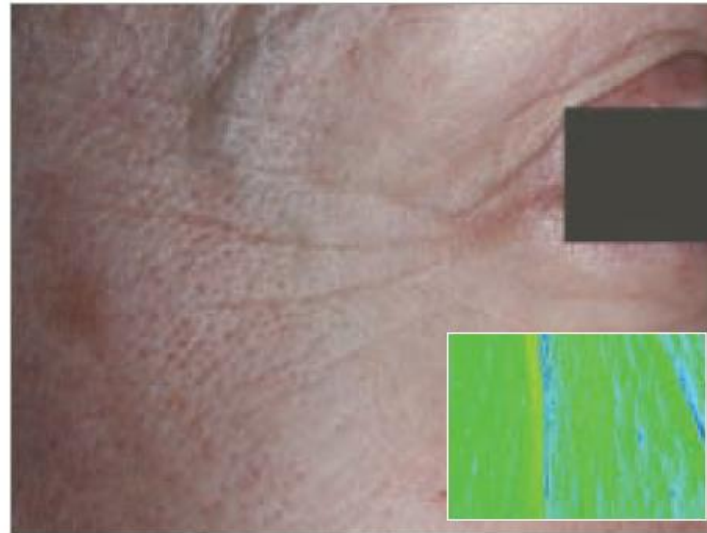
Efficacy – Clinical Trial

→ In-vivo Efficacy

Day 0



Day 28 with Hexapeptide-9



- ❖ Confirmed improvement in deep wrinkle around eyes after 28 days.
- ❖ It shows that Hexapeptide-9 is very suitable for anti-aging skin care products as it works intensely on deep wrinkles
- ❖ Collagen synthesis, regeneration of epidermis and dermis

Compositions of WP-HP9

Compositions of the proposed formulation using purified water

INCI Name	Contents (%)
Purified Water	Up to 100
Hexapeptide-9	0.05
1,2-Hexanediol	2.0
Ethylhexylglycerin	0.1

Summary of WP-HP9

Efficacy of final formulation and recommended dosage

Efficacy	Anti-aging
Recommended Dosage	0.5~1.5 % of 500ppm solution