



DermaPep™ A350

Retinoic acid- like peptide

DermaPep™ A350

Retinoic Acid-like Peptide

Introduction

In vitro and *in vivo* study results show that Myristoyl tripeptide-31, a multifunctional retinoic acid-like tripeptide, is very effective in reversing age-related changes, such as wrinkles, mottled hyperpigmentation, and can be a powerful substitute for retinoids without any side effects.

Product Information

- Appearance : Transparent solution
- INCI/CTFA-Declaration : Myristoyl Tripeptide-31 (and) Butylene Glycol
- Active ingredient content : 0.1% Myristoyl Tripeptide-31
- Powder purity : 95 % up
- Preservative : None

Function

- Anti-wrinkle for face and body
- Increase of collagen synthesis
- Providing exceptional anti-aging benefits
- whitening effect
- Skin pore contraction

Applications

DermaPep™ A350 can be incorporated in cosmetic formulations such as emulsions, oily sera, gels and creams for anti-aging and anti-wrinkle purpose.

Formulation

- Dermatological tolerance : Standard testing has been performed on DermaPep™ A350 which has showed neither cytotoxic effects nor any irritation or sensitization reaction in healthy volunteers with an occlusive single patch test.
- Recommended concentration : 2-4 %

Function of DermaPep™ A350

Myristoyl Tripeptide-31, Retinoic acid like peptide

1. Anti-aging, Anti-wrinkle Efficacy

- Inhibition of MMP-1 gene transcription and translation
- Induction of procollagen I protein production
- Anti-aging effect *in vivo*

2. Whitening Efficacy

- Inhibition of melanin synthesis
- Inhibition of tyrosinase activity
- Inhibition of melanogenic genes expression
- Skin-lightening effect *in vivo*

3. Anti-inflammatory Efficacy

- Inhibition of pro-inflammatory cytokines

4. Skin Pore contraction

- Reduction of pore size

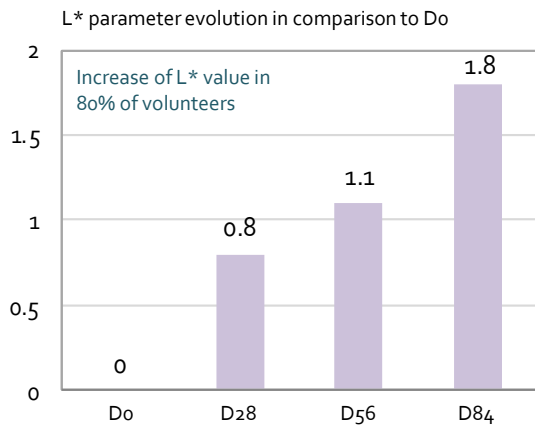
DermaPep™ A350

Retinoic Acid-like Peptide

Lightening Efficacy on Asian Skin Type

- 30 Asian female volunteers (Bangkok)
- Aged 40 to 60.
- 2% of DermaPep™ A350
- Twice daily during 12 weeks on the crow's feet area.
- Chromameter and digital photography

Lightening Effect of skin tone

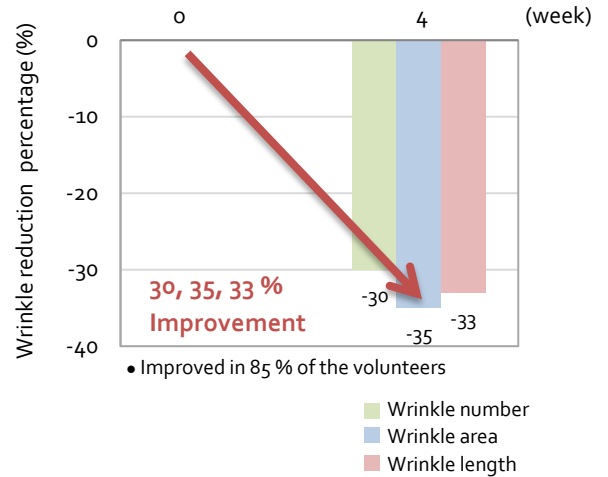


L* is luminosity which represents relative brightness from total darkness (L*=0) to absolute white (L*=100)

Anti-aging Efficacy

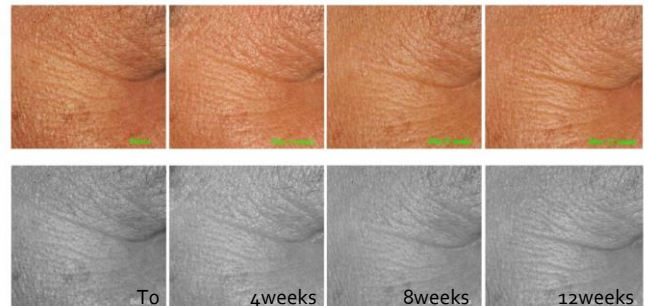
- 30 Asian female volunteers (Bangkok and Korea),
- Aged 40 to 60
- 2% of DermaPep™ A350
- Twice daily during 12 weeks on the crow's feet area.
- Replica analysis and digital photography.

Facial Pore Contraction

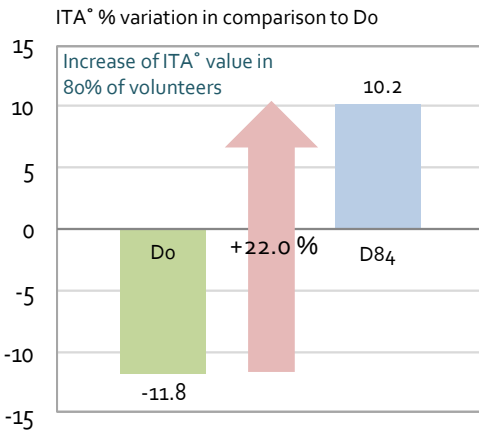


Illustrative Pictures

Illustrative picture (Before - After) for Study R2-RF02-MW-AL10: Subject no. F00667



| 2% DERMAPEP™ A350 | | | | |
|---------------------------------------|-------|-----------|-----------|------------|
| Code Foo667 | To | T+4 weeks | T+8 weeks | T+12 weeks |
| Number of wrinkles | 38 | 16 | 2 | 3 |
| Total wrinkle area (mm ²) | 11.11 | 2.77 | 0.46 | 1.04 |
| Total wrinkle length (mm) | 47.16 | 15.17 | 2.13 | 3.75 |



A whitening agent must increase Individual Typological Angle ITA° parameter.

DermaPep™ A350

Retinoic Acid-like Peptide

Anti-Aging , Depigmentation and Skin Pore Contraction Efficacy on Human Skin

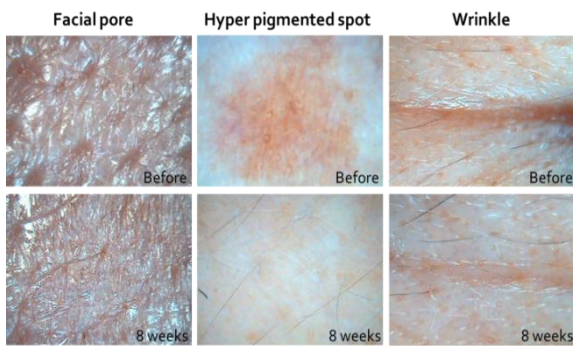
- 20 Asian female volunteers (Korea)
- Aged 35 to 60.
- 2% of DermaPep™ A350
- Twice daily during 8 weeks on the crow's feet area.
- Replica analysis, chromameter and digital photography

Skin Pore Contraction Efficacy

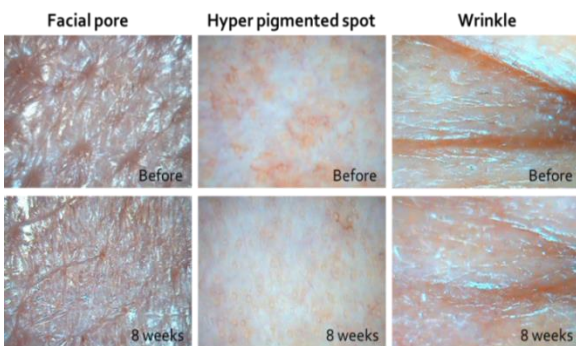
- 23 Asian female volunteers (Bangkok and Korea),
- Aged 30 to 50
- 2% of DermaPep™ A350
- Twice daily during 8 weeks on the crow's feet area.
- Skin pore reduction was evaluated by DM-3.

Illustrative Pictures

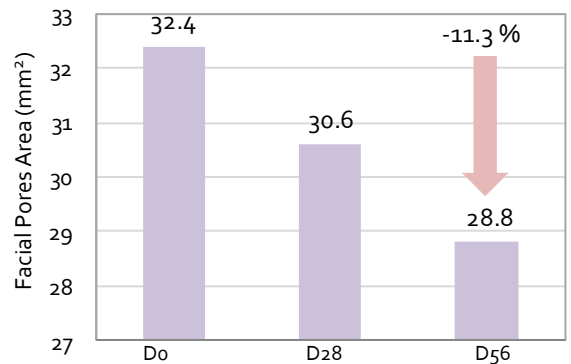
Case 1.



Case 2.



Facial Pore Contraction



DermaPep™ A350 significantly reduced skin pore size by 11.3% in 8 weeks.

DermaPep™ A350 showed significant improvement on skin pore size, mottled hyperpigmentation and wrinkle on human skin.



Miwon Commercial Co., Ltd.

<http://www.dermapep.com>

E-mail : dermapep@mwc.co.kr