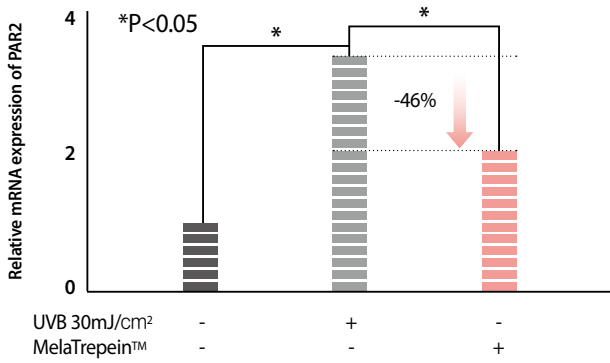
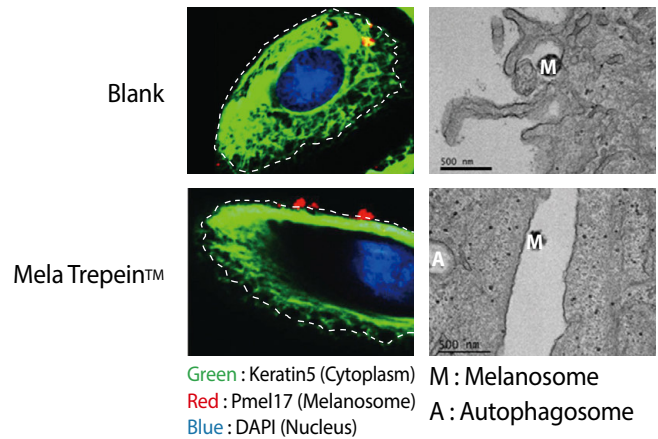


MelaTrepein™ reduces melanosome uptake

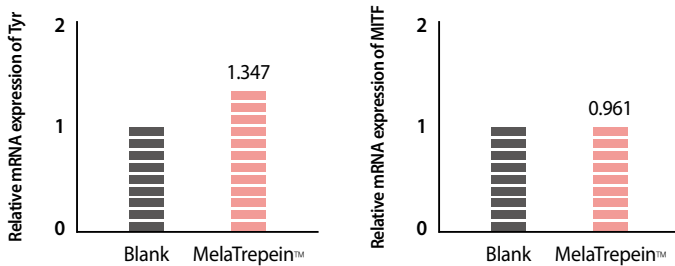


MelaTrepein™ reduces the endocytosis related gene, PAR2, expression in keratinocytes

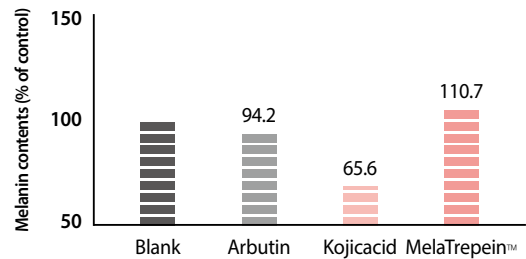


MelaTrepein™ inhibits melanosome uptake into keratinocytes

MelaTrepein™ does not affect melanogenesis



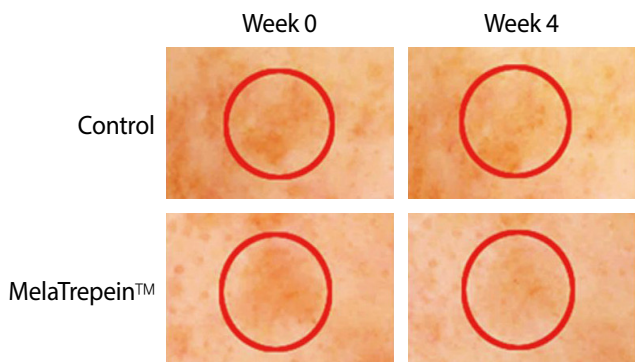
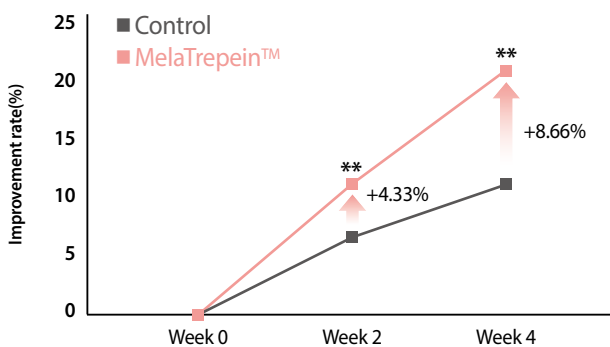
MelaTrepein™ dose not affect MITF & tyrosinase mRNA expression in melanocytes



MelaTrepein™ dose not affect melanin contents in melanocytes

Clinical Efficacy

MelaTrepein™ improves anti-pigmentation



Topical application of MelaTrepein™ significantly reduces hyperpigmentation within 4 weeks

PCPC/INCI Name

- Pentasodium Tetracarboxymethyl Dipeptide-51
- Pentasodium Tetracarboxymethyl Acetylhydroxypropyl Dipeptide-12

Composition

- MelaTrepein™, 1,2-Hexanediol, Water

Recommended Dosage

- 2% for Skin Brightening Product

Application

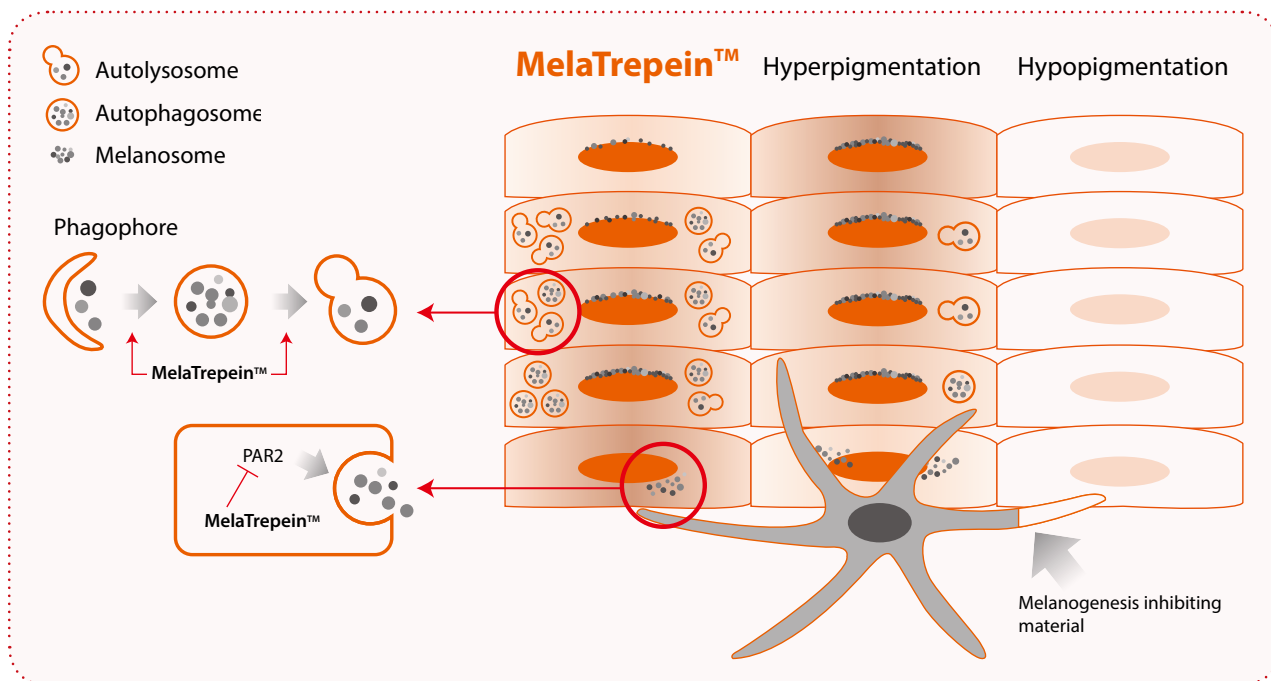
- Anti-pigmentation • Skin care • Brightening

More Safety / More Activity / More Efficiency

Description

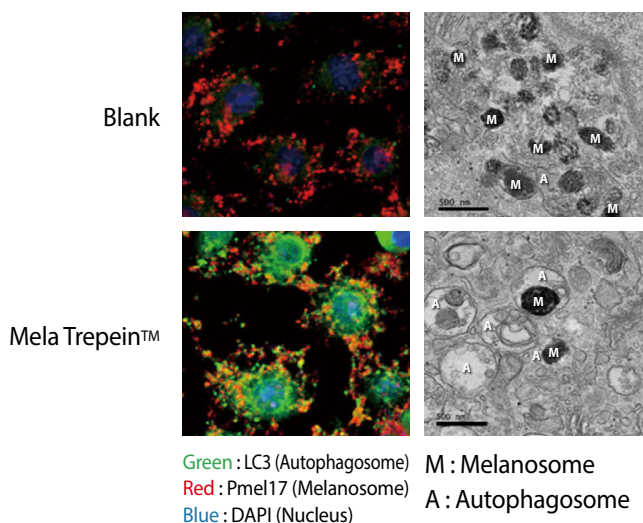
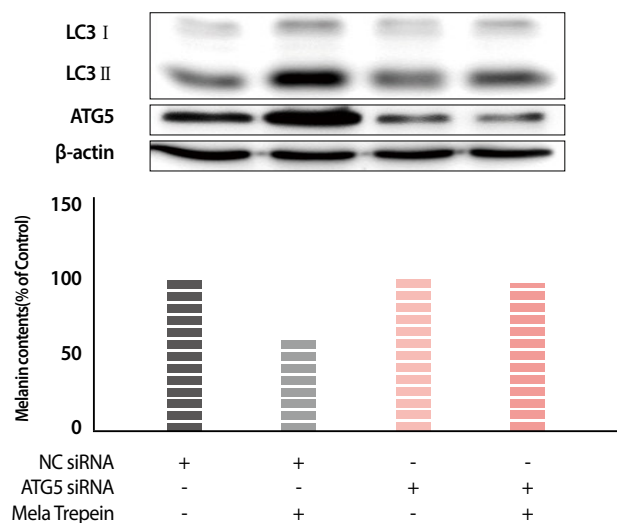
Melanosomes are transferred to neighboring keratinocytes and then naturally degraded by autophagy. However, when the skin is constantly exposed to sunlight, pathogens, and hormonal changes, intracellular organelles and enzymes lose their functions and, as a result, melanosomes can not be broken down. Accumulation of undegraded melanosomes in keratinocytes results in skin pigmentation.

MelaTrepein™ provides a dual targeting solution to prevent or reduce skin pigmentation by activating autophagy to break down melanosomes in keratinocytes and by inhibiting melanosome uptake into keratinocytes at the same time.



Biological Activity

MelaTrepein™ degrades melanosomes through autophagy activation



Melanin reduction effect of **MelaTrepein™** is attenuated in autophagy-deficient keratinocytes

MelaTrepein™ increases autophagosomes in which melanosomes are sequestered