

# Biobloom™ Microecobeauty ME-1

「Obtained from a unique probiotic fermentation technology that adjusts the skin microecology and improves overall skin health.」

- ◎ Regulate the skin microbiota
- ◎ Improve the balance of water and oil
- ◎ Promote antimicrobial peptide synthesis
- ◎ Enhance skin immunity

Biobloom™ Microecobeauty ME-1 is obtained from a ferment lysate form from the probiotic lactobacillus rhamnosus isolated by Bloomage biotech. The fermentation enzymatic hydrolysis suspension contains intracellular and extracellular metabolites of lactobacillus rhamnosus and active bacterium ingredients. Tests show that ME-1 can significantly inhibit the reproduction of harmful bacteria, regulate the skin microbiota, and correct the imbalance of oil secretion and pH caused by abnormal skin microbiota. Meanwhile, ME-1 can significantly upregulate the expression of skin immune-related genes, promote the synthesis of antimicrobial peptides, improve the activity of immune cells, and enhance the skin immune function.

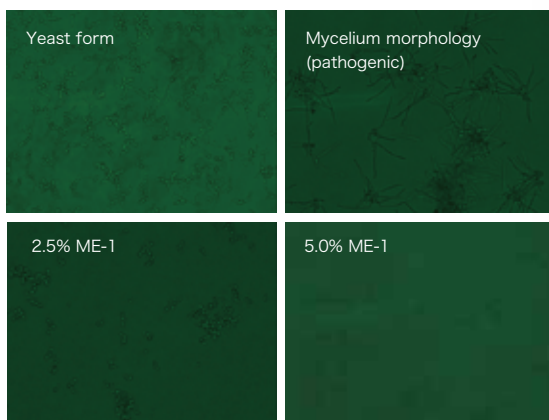
## Efficacy

**[Regulate skin microbiota, improve skin oil secretion and pH imbalance]**

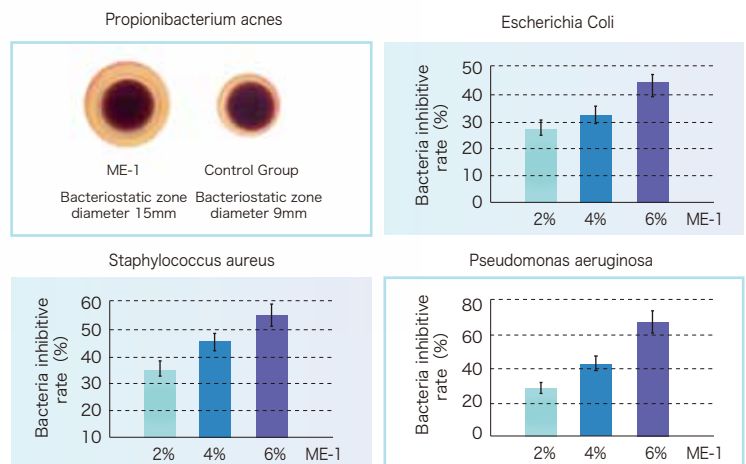
### 1. Inhibit harmful bacteria reproduction and improve the skin microbiota (*in-vitro*)

Tests show that ME-1 can effectively inhibit the propagation of Propionibacterium acnes, Staphylococcus aureus, Pseudomonas aeruginosa and Escherichia Coli, and inhibit the growth of Candida albicans (pathogenic), and have no significant effect on the activity of beneficial bacteria. ME-1 can improve the skin microbiota by inhibiting the growth and reproduction of harmful bacteria on the skin surface.

**ME-1 can inhibit the growth of Candida albicans mycelium**

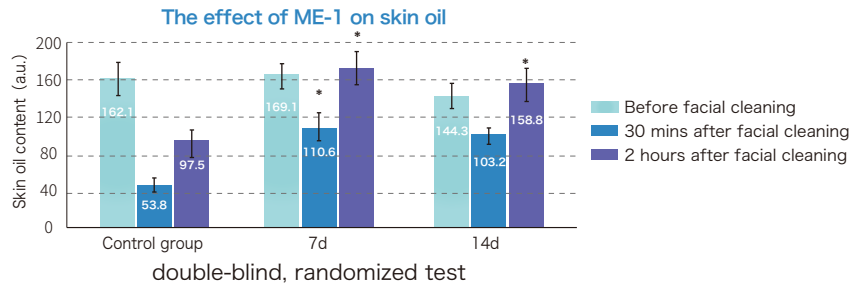
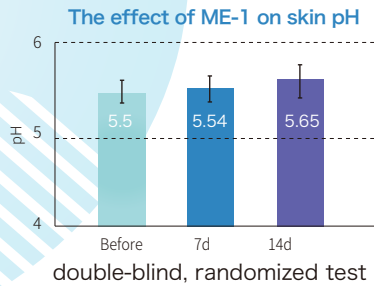


**ME-1 can inhibit the growth and reproduction of Propionibacterium acnes, etc.**



## 2.Improve skin oil secretion and pH imbalance (in-vivo)

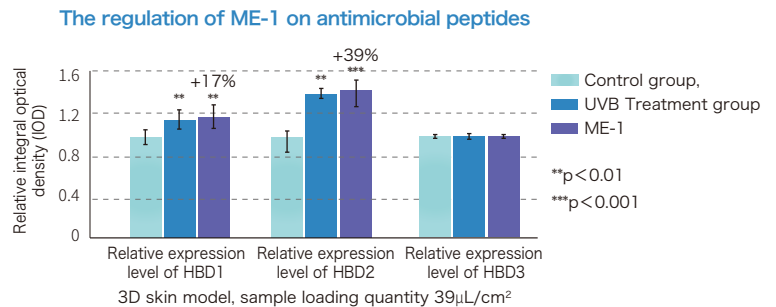
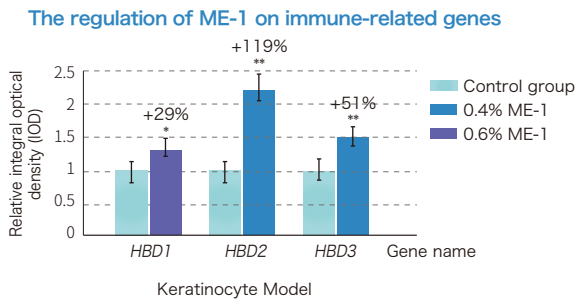
In-vivo test shows that ME-1 can regulate skin oil secretion and pH balance. Continued use of 5% ME-1 essence for 2 weeks resulted in a significant decrease of skin oil level and a slight increase of skin pH. Meanwhile, ME-1 can significantly improve the sharp decrease of oil content after facial cleansing, and the oil level of skin can be restored to 65% of its normal level after 30 minutes of facial cleansing. Therefore, ME-1 has satisfied oil control ability and bi-directional effect of regulating skin water and oil balance.



## [Strengthening the skin microbial barrier and immune barrier]

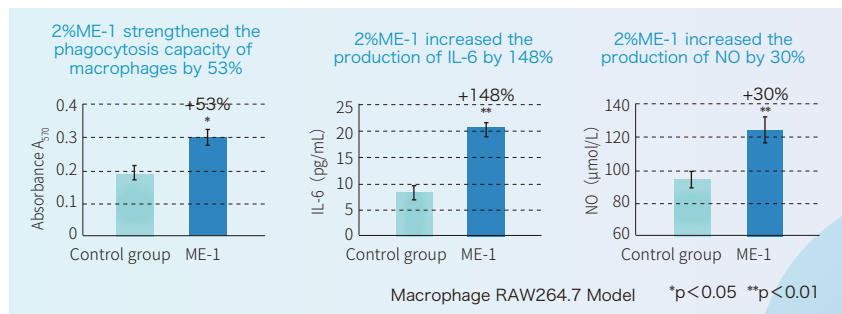
### 1.Up-Regulate the expression of skin immune-related genes, promote the synthesis of antimicrobial peptides (in-vitro)

Antimicrobial peptides (AMPs) can kill or inactivate harmful bacteria and fungi, play an important role in enhancing skin immunity, repairing damaged barrier and maintaining homeostasis (e.g., decreasing TEWL). The tests show that ME-1 can significantly up-regulate the expression of skin immune-related genes and antimicrobial peptides, enhance the skin microbial barrier and help maintain the normal skin microbial community and immune function.



## 2.Enhance the activity of immune cells (in-vitro)

Macrophages play a significant role in the immune system by devouring pathogens, presenting antigens and releasing cytokines, participating in all stages of the immune response. Test shows that 2% ME-1 can significantly enhance the phagocytic capacity of macrophages and enhance the ability of macrophages to produce cytokines (IL-6) and cytotoxic components (NO), so as to enhance the skin immune function.



## Introduction

**[INCI name]** Lactobacillus fermentation lysates.

**[Application]** Widely used in all kinds of cosmetics formulas: mask, liquid, essence, cream, lotion, cleansing, hair products, etc.

**[Recommended Dosage]** 0.5%-5%

**[Usage]** ME-1 is a suspension, long-term standing will cause precipitate, thus, please shake well before use.



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