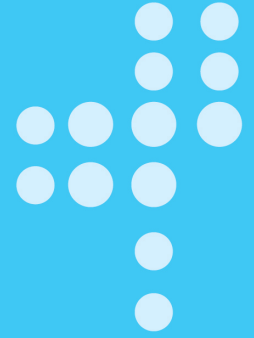


PREBIOME™

- Purpose for skin microbiome balance -

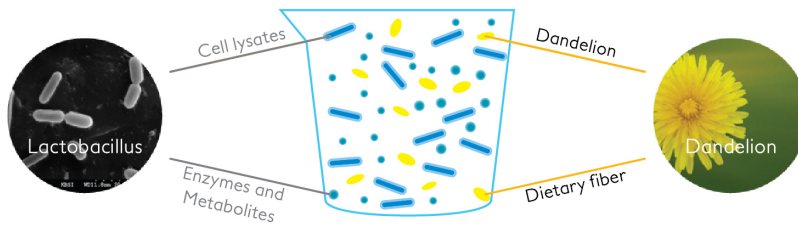


Applicable products of PREBIOME™

Skin care, Body care, Baby care, etc.

What is PREBIOME™?

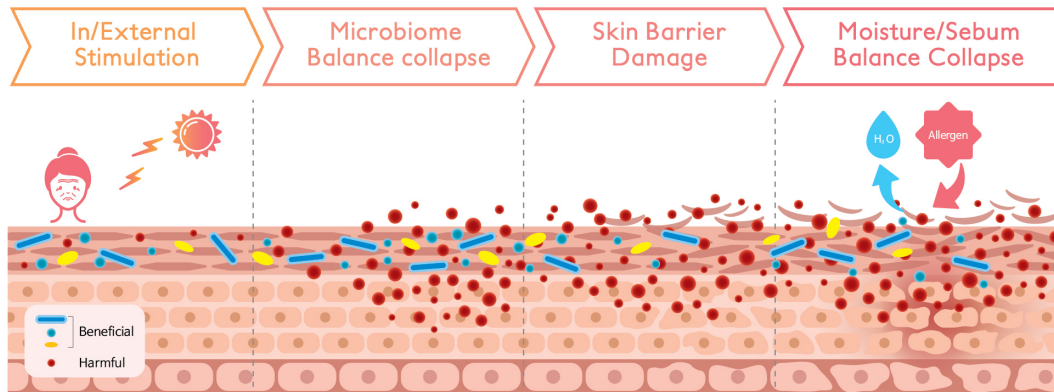
For healthy skin's natural beauty, PREBIOME™ improves skin microbiome balance by decreasing harmful bacteria and increasing beneficial bacteria including lactic acid bacteria



Use *Lactobacillus plantarum* isolated by RADIANT Inc.

Even bring 'Postbiotics' effect with *Lactobacillus plantarum* ferment lysate, a real skin lactic acid bacteria!

PREBIOME™ helps growth of lactic acid bacteria and improves to a healthy skin ecosystem (Microbiome)



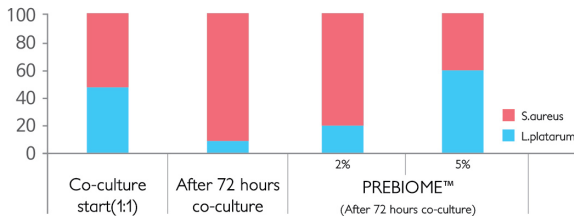
Healthy skin balances beneficial and harmful bacteria. However, when the skin is damaged by a variety of factors, it loses the balance and results in an increase in the amount of harmful bacteria and a breakdown of the skin barrier.

SPECIFICATION

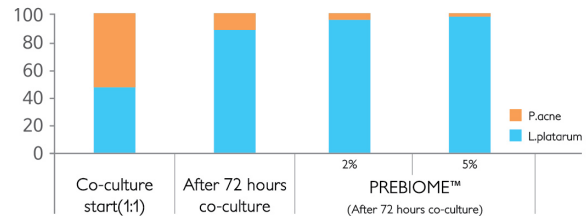
INCI Name	Water / Butylene Glycol / 1,2-Hexanediol / Lactobacillus Ferment Lysate / Taraxacum Officinale (Dandelion) Leaf Extract / Ethylhexylglycerin
China Compliance	水 / 丁二醇 / 1,2-己二醇 / 乳酸杆菌发酵溶胞产物 / 欧蒲公英(TARAXACUM OFFICINALE)叶提取物 / 乙基己基甘油
Color	Pale Brown to Light Brown
Shelf life	2 years
Recommend dosage	2% - 5%

Main Biological Effects for Cosmetics

● [In-vitro study] Regulation of Skin Microbiome

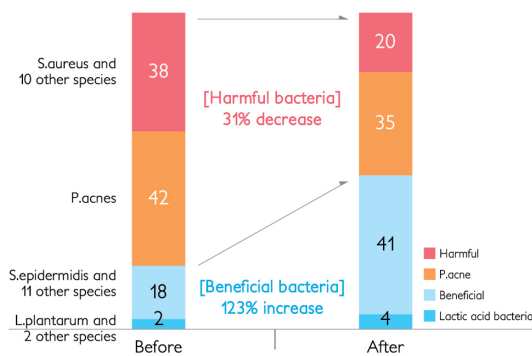


PREBIOME™ increases beneficial *L.plantarum* while decreases harmful *S.aureus*.



PREBIOME™ increases beneficial *L.plantarum* while decreases harmful *P.acne*.

● [In-vivo study] Regulation of Skin Microbiome Distribution



Collect 27 kinds of microorganisms on the face and check microbiome distribution (by DNA detection)

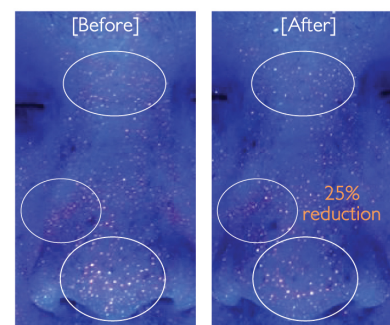
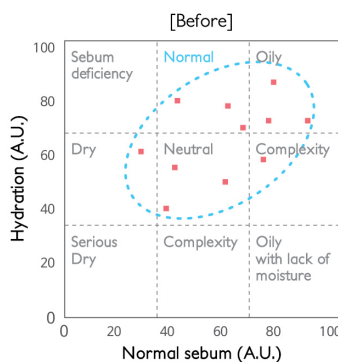
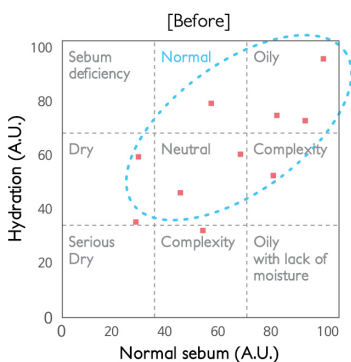
[Before : Normal Condition]

80% of harmful bacteria (+P.acne) and 20% of beneficial bacteria (+Lactic acid bacteria) are measured.

[After : With PREBIOME™]

By applying 3% PREBIOME™ for 4 weeks, 55% of harmful bacteria (+P.acne) and 45% of beneficial bacteria (+Lactic acid bacteria) are measured.

● [Clinical study] Skin Hydration&Sebum, Skin comedogenic activity



Dot = Porphyrin & causing acne ingredients

- Subject : 10 person (20-50 years)
- Test period : 4weeks
- Application : Treat 3% PREBIOME™ mist to the face, 2 times a day
- Measurement : Check skin redness improvement with equipment (Soft Plus, OBSERV)

PREBIOME™ improves moisture & sebum level near to normal skin level (Hydration 10% increase, Sebum 20% decrease)

PREBIOME™ improves skin redness and decreases acne causing ingredients.