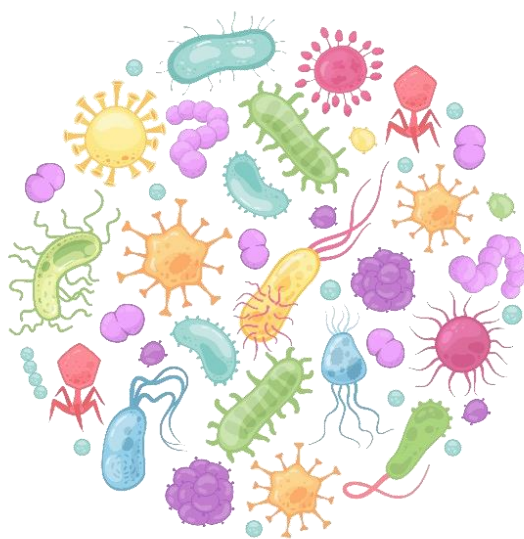




KALIBIOME

POSTBIOTIC RESEARCH FOR **MICROBEAUTY**




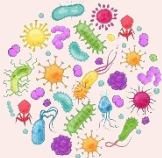


MADE IN ITALY

>> KALIBIOME POSTBIOTICS : A NEW CONCEPT FOR MICROBIOTA CARE

EXCLUSIVE PATENTED POSTBIOTICS: ADDED VALUE AND IMPACT ON THE INDUSTRY

Kalibiome postbiotics is a platform of patented and purified actives obtained through a *patented bio-fermentation process* (PB TECH).

KALIBIOME POSTBIOTICS: OVERVIEW OF DIFFERENCES vs COMPETITORS

| Comparison active | Composition & Features | Kalibiome postbiotics added values |
|--|---|---|
| PRE-biotics  | FOOD FOR BACTERIA Able to stimulate indistinctly their growth (eg. fibers, carbohydrates, etc.) | <ul style="list-style-type: none"> • Higher specificity of action • No risk of feeding pathogen bacteria • Well identified and activity on a broader range of biological targets |
| PRO-biotics  | LIVING BACTERIA Promising action in pre-clinic trials: not indicated in case of acute inflammations and with known interferences with cosmetics preservatives: limited use, given by stability and safety concerns | <ul style="list-style-type: none"> • No interference with preservatives in formula and higher formula stability • No living bacteria, no cell walls fragments • Reduction of potential toxicity related to toxins and antigens absence • No skin/bacteria cross talking required to get beneficial actions • Storage at room temperature, no refrigeration need • Active in all unbalanced microbiota and «uneducated» skin cases |
| PARApro-biotics  | HEAT-INACTIVATED BACTERIA Technologically more stable than probiotics. Low concentrations of beneficial substances. Safety is of concern because of the presence of bacterial wall and potentially irritating toxins. Not indicated in presence of acute inflammation. | <ul style="list-style-type: none"> • No potential interference with preservatives in formula and higher formula stability • No cell walls fragments, no risk of premature tyndallized bacteria activation • Reduction of potential toxicity related to cells toxins and antigens absence • No skin/bacteria cross talking required to get beneficial actions • Active in all unbalanced microbiota and «uneducated» skin cases |
| Lysates & ferment filtrate  | BACTERIAL FRAGMENTS, METABOLITES AND CULTURE BROTH obtained through traditional bacterial fermentation. The final output is a filtered or not filtered culture broth, containing low concentrated actives, bacterial fragments & residual food. Ferments are not specific and difficultly reproducible. | <ul style="list-style-type: none"> • Standardized and reproducible postbiotic composition • Higher postbiotics concentration and more refined purification • Selected postbiotics (few dozen units chosen depending on the functional target desired) • Lower concentration of use required in cosmetics formulation • Optimized organoleptic features |

WHY CHOOSING KALIBIOME POSTBIOTICS: FEATURES AND FUNCTIONS

Postbiotics are substances (**peptides, fatty acids, biosurfactants**) released by commensal bacteria. They are the «**messengers and effectors**» of **bacteria** beneficial actions on the skin. The **PB Tech** enables to design actives, by **modulating with unique know bacterial fermentations** addressing the output to a selected yield of actives with variable nature depending on the application need, in order to **increase functionality in microbiota reinforcement and reset the technological instability and side effects related to probiotics.**

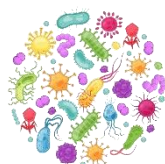


Concentrated biotech active specialties.

Fermentation carried in minimal media & controlled conditions. No living bacteria, residual food or bacterial fragments. Direct beneficial effects on skin and microbiota. Highly reproducible composition.

White, soluble, colorless,
odorless powder
with
concentrated actives

- Concentrated and reproducible post-biotics complex
- Obtained by controlled bio-fermentation, finalized to select a specific actives output
- No bacterial fragments/toxins, only ferment actives
- Total absence of side effects and maximum tolerability
- No interference with cosmetics preservatives
- No culture broth or living bacteria, preservatives free
- Powder form
- Low concentration of use required (0.1 ÷ 0.5 %)



KALIBIOME AGE

KALIBIOME SENSITIVE

KALIBIOME ECOGENETIC

KALIBIOME ORIS



Head Office and Production:

Via L.Alessandrini 8 – 25085 Rezzato (BS) ITALY

Tel: +39.030.26.93.532 – Fax: +39.030.21.93.581

kalichem@kalichem.it

www.kalichem.it

MADE IN ITALY

