



POSTBIOTIC SKINCARE INGREDIENT

LactoFuse

Lactobacillus Ferment Filtrate Extract

A next-generation, cell-free postbiotic for advanced skin health — derived from the controlled fermentation of *Lactobacillus rhamnosus* LRH9.

Apollo Ingredients Limited

A science-driven nutrition and wellness company focused on developing and manufacturing high-quality dietary supplements and nutraceutical ingredients.

With a strong commitment to innovation, quality, and sustainability, Apollo serves global markets through advanced manufacturing, stringent quality standards, and customer-centric solutions — delivering value-added products that support health, wellness, and a better quality of life while building long-term partnerships worldwide.

Formerly Indsoya Limited CIN: L67120MH1980PPLC023332



Happy Customers



Research & Innovation



Expert Team



Worldwide Presence

THE PRODUCT

Introducing LactoFuse

Cell-Free Postbiotic

Derived from the controlled fermentation of *Lactobacillus rhamnosus* LRH9, followed by the careful removal of viable bacterial cells — delivering the benefits of fermentation without any live microorganisms.

Engineered for modern skincare formulation

LactoFuse is rich in fermentation-derived metabolites, peptides, amino acids, vitamins, and other bioactive compounds — widely used in cosmetic, personal care, and skincare formulations to support skin health and enhance overall skin appearance.



Strengthens the skin barrier

Reinforces the skin's natural protective barrier and supports resilience.



Maintains moisture balance

Promotes optimal hydration for a soft, smooth, healthy-looking complexion.



Balances the skin microbiome

Supports a healthy, balanced microbiome for visibly radiant skin.



Stable & formulation-friendly

Gentle, non-living nature with pH- and heat-resistant properties.

What's inside LactoFuse

A concentrated, cell-free filtrate carrying the beneficial biological activity of fermentation-derived compounds.



Bioactive Metabolites

Fermentation-derived actives that drive LactoFuse's skin-supporting and protective performance.



Peptides

Short protein fragments that help support skin renewal, comfort, and resilience.



Amino Acids

The natural building blocks of skin, contributing to hydration and barrier support.



Vitamins

Fermentation-sourced micronutrients that nourish and brighten the complexion.



Other Bioactives

A broad spectrum of supporting compounds for balanced, microbiome-friendly skin.

Key benefits at a glance



Cell-Free Postbiotic Tech

Bioactive metabolites from LRH9 fermentation — with no live microorganisms.



Supports Skin Barrier

Strengthens the natural protective barrier and improves overall resilience.



Enhances Hydration

Supports moisture balance for softer, smoother, healthier-looking skin.



Balances Microbiome

Microbiome-friendly action for improved skin health and comfort.



Improves Radiance

Enhances skin texture, brightness, and overall complexion.



Antimicrobial Action

Broad-spectrum antimicrobial potential supporting performance and wellness.



Formulation Compatible

Suits serums, creams, toners, masks, and body-care products.

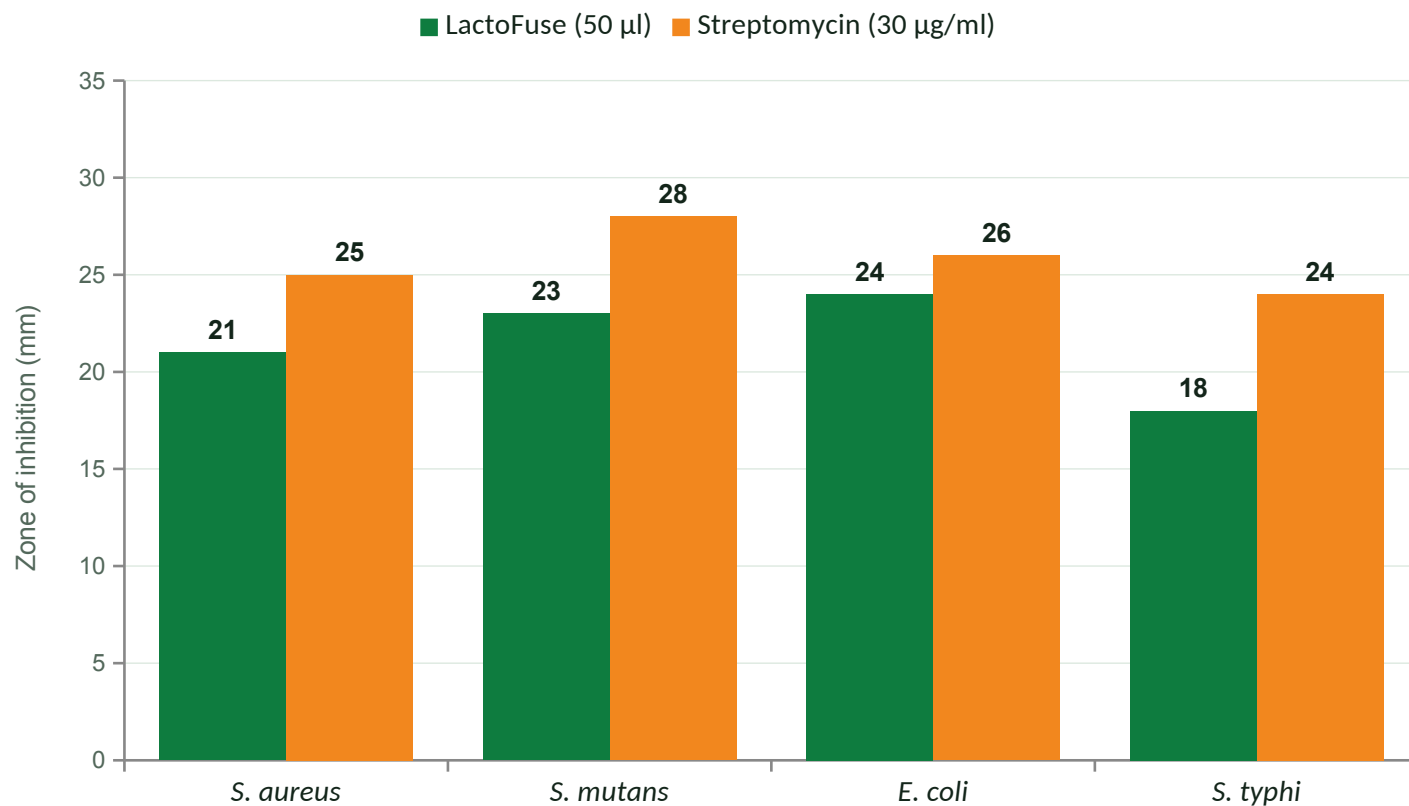


Ideal for Sensitive Skin

Gentle and non-irritating — perfect for soothing and barrier-repair.

Broad-spectrum antibacterial activity

Zone of inhibition (mm) by horizontal agar diffusion assay. The cell-free postbiotic performed comparably to the streptomycin positive control across all tested pathogens; the MRS negative control showed zero activity.



Comparable to antibiotic control

LactoFuse reached 18–24 mm zones versus 24–28 mm for streptomycin — strong activity from a gentle, natural postbiotic source.

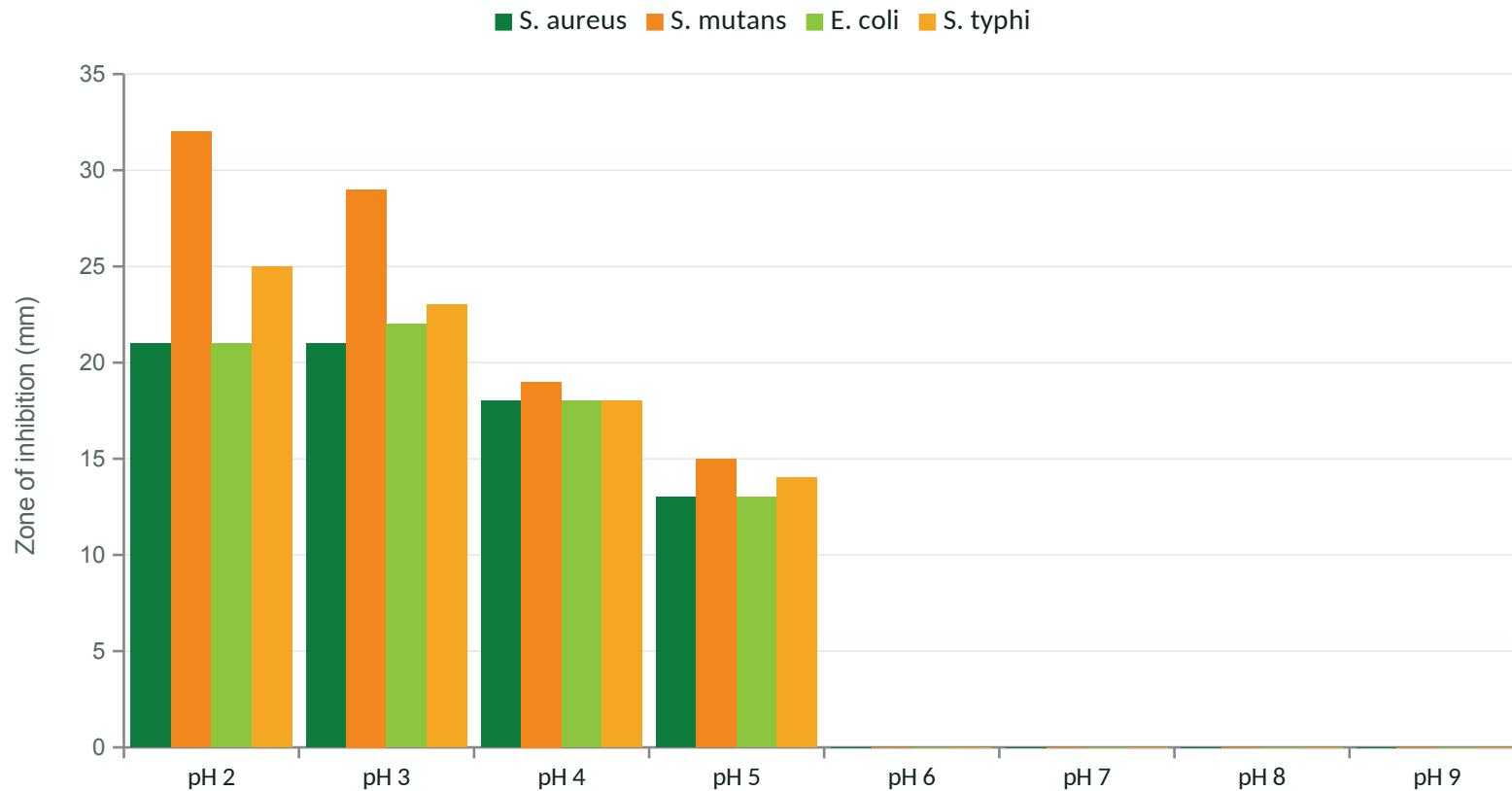
Tested against 4 key pathogens

- ✓ *Staphylococcus aureus*
- ✓ *Streptococcus mutans*
- ✓ *Escherichia coli*
- ✓ *Salmonella typhi*

STABILITY PROFILE

Activity is strongest in the acidic range

Antibacterial zone (mm) of LRH9 postbiotic across pH 2–9. Activity peaks under acidic conditions and tapers off at neutral-to-alkaline pH — characteristic of organic-acid-rich postbiotic metabolites.



LACTOFUSE • pH STABILITY • mean ± SD, n = 3

pH 2–5

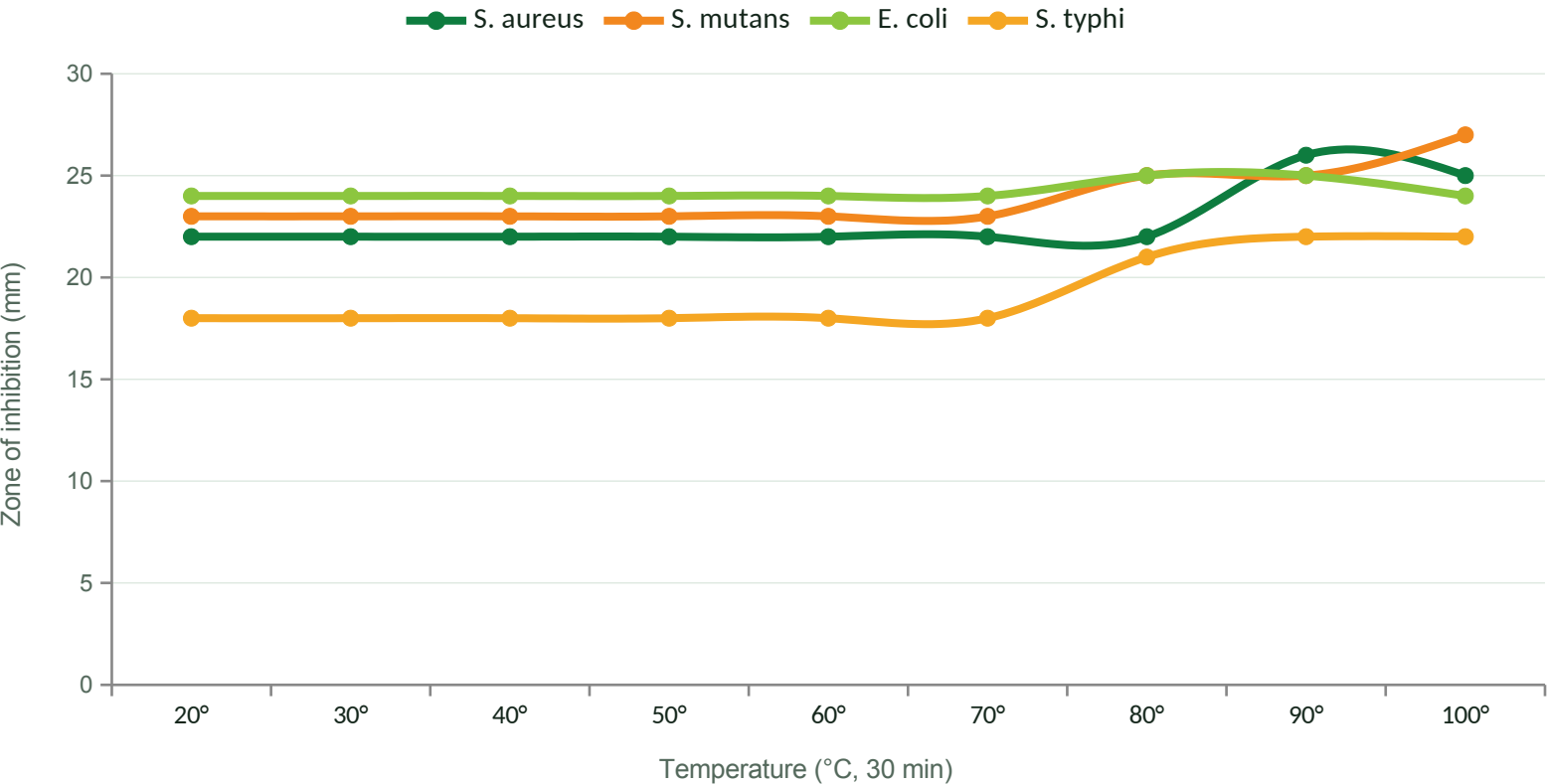
Active range — peak zones up to 32 mm against *S. mutans* at pH 2.

Formulation insight

Best antimicrobial performance is delivered in low-pH formats such as toners, essences, and acidic serums.

Remarkable heat resistance

Antibacterial zone (mm) after 30 minutes at 20–100 °C. Activity is fully retained — even after exposure to boiling temperatures — confirming exceptional thermal stability for demanding manufacturing processes.



Up to 100°C

Activity is preserved across the full range — no loss of efficacy after boiling.

Formulation insight

Withstands hot-process and emulsification steps — ideal for creams, balms, and heat-set formulations.

WHERE TO USE IT

Versatile across formats

Excellent formulation flexibility and stability make LactoFuse suitable for a wide range of cosmetic and personal-care products.



Serums

Lightweight, active-rich treatments



Creams

Moisturisers and barrier-repair creams



Toners

Low-pH essences and toners



Masks

Soothing and revitalising masks



Body Care

Lotions and body treatments



Ideal for sensitive-skin formulations

Gentle, non-irritating, and microbiome-friendly — perfectly suited to soothing, barrier-repair, and post-treatment skincare.



An expanding evidence pipeline

Pre-clinical and clinical studies are in process to broaden LactoFuse's validated claims across skincare and wellness.



IN PROGRESS

Anti-Acne Effects

Evaluating clarifying and blemish-control benefits.



IN PROGRESS

Anti-Aging

Assessing impact on firmness, texture, and visible aging.



IN PROGRESS

Oral Hygiene

Exploring postbiotic potential for oral-care applications.



Peer-reviewed research for your reference

Read the publication: [sciencedirect.com/science/article/pii/S2772613425000174](https://www.sciencedirect.com/science/article/pii/S2772613425000174)

PARTNER WITH APOLLO INGREDIENTS

Bring next-generation postbiotic skincare to your line

Stable, gentle, and science-backed — LactoFuse is ready for innovative skincare, cosmetic, pharmaceutical, and wellness formulations. Let's build the next breakthrough together.



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