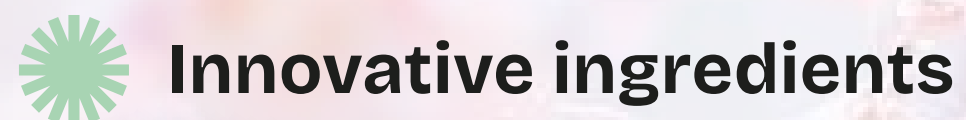




Biomimetic peptide designed to target acne-associated bacteria and visibly calm inflammation-prone skin

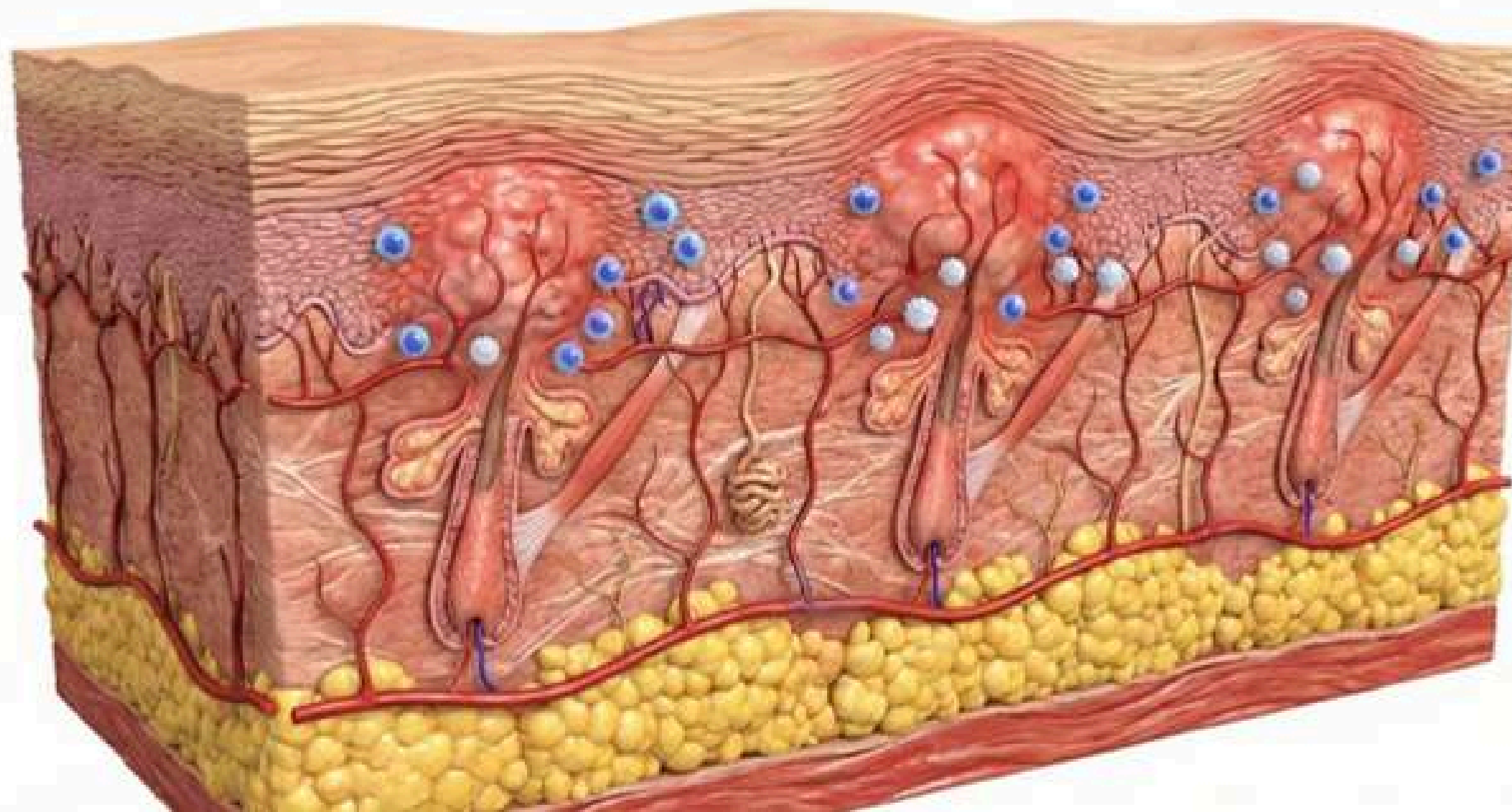
SCH PeptCare™ LZ1



SCH PeptCare™ LZ1 is a biomimetic host-defense peptide designed to help rebalance blemish-prone skin by **targeting acne-associated bacteria** and supporting a calmer skin environment. Its activity has been described in cellular models relevant to acne and inflammatory stress:

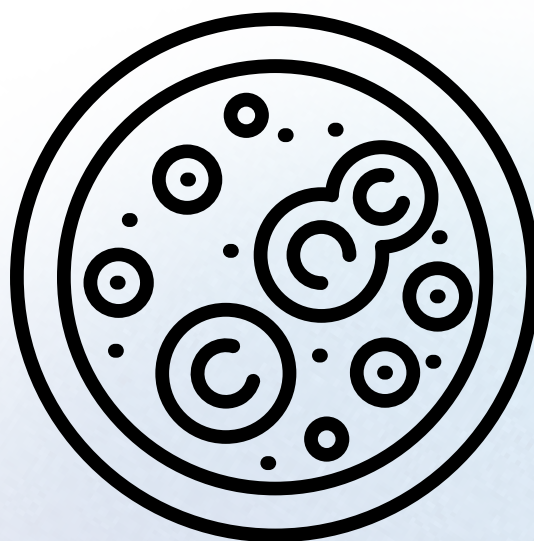
- Help **reduce growth** of acne-associated bacteria (*C. acnes*/*P. acnes*)
- Help visibly **calm inflammation-linked responses** after bacterial challenge
- Support a **clearer-looking skin environment** by limiting pro-inflammatory cascades associated with blemishes

Main Function



LZ1 Peptide

Targeted host-defense activity against acne-associated bacteria, helping to minimize inflammation-related responses and improve the appearance of blemish-prone skin.



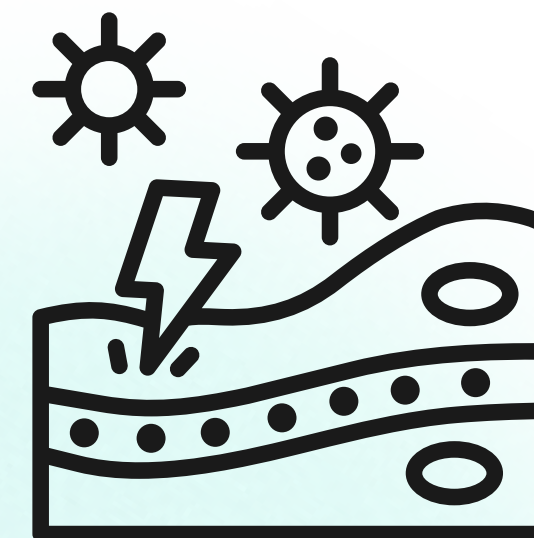
Antibacterial action

Selective antimicrobial activity against C. acnes, supporting reduction of bacterial load associated with breakouts.



Clear-skin environment

Supports a clearer-looking complexion by helping rebalance the skin microbiological/inflammatory triggers associated with acne.



Anti-inflammatory support

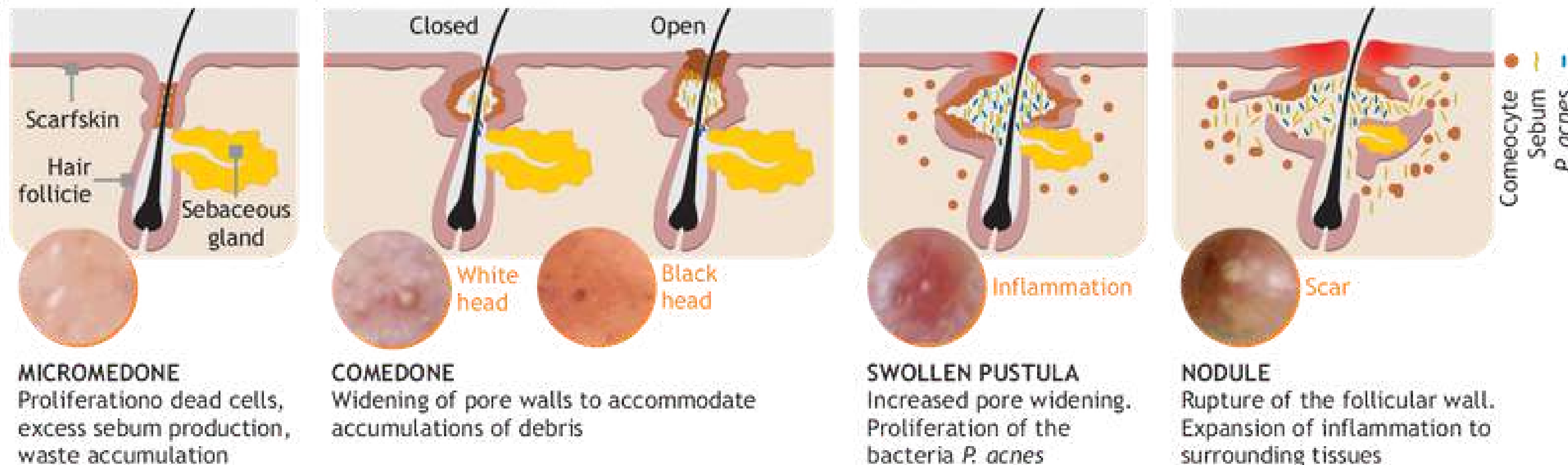
Helps reduce visible signs linked to bacterial challenge by limiting inflammatory cell response in challenge models.

Blemish-prone skin: the challenge



Acne-prone skin is often associated with an **imbalance of the skin microbiome** and an exaggerated inflammatory response to acne-associated bacteria (*Cutibacterium acnes*). This can trigger redness, discomfort and the appearance of inflammatory blemishes, ultimately **impacting skin clarity** and overall skin quality.

Blemish-prone skin: the challenge



Acne-associated bacteria and inflammation: the opportunity

Biomimetic host-defense peptides are versatile tools to help rebalance the skin environment by **targeting microbes and modulating inflammation-linked responses**. In in vitro challenge models, peptides such as LZ1 have been studied for their ability to inhibit acne-associated bacteria and help reduce inflammatory cell responses triggered by bacterial exposure.



Efficacy Studies

In bacterial challenge models relevant to acne, LZ1 peptide demonstrated **significant antimicrobial activity**, with low minimum inhibitory concentrations (MIC), together with a reduction in inflammatory cell infiltration following exposure to the bacteria.

Effect on bacteria

Effect of LZ1 peptide on different bacteria

Bacteria	LZ1 MIC (µg/ml)
P. acnes (ATCC6919)	0,6
P. acnes (ATCC11827)	0,6
P. acnes (IS, DR)	0,6
S. epidermidis (09A3726)	4,7
S. epidermidis (09B2490)	2,3
S. aureus (09B2499)	2,3

These findings support its potential to help limit bacterial overgrowth and associated inflammatory responses.

Efficacy Studies

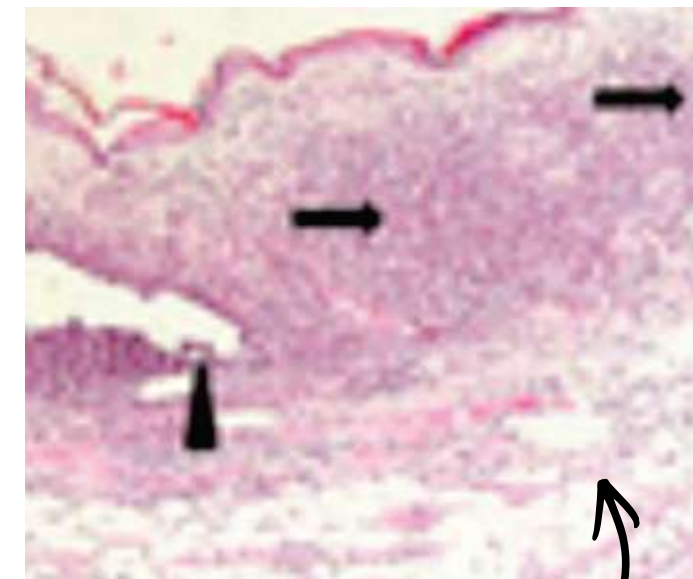
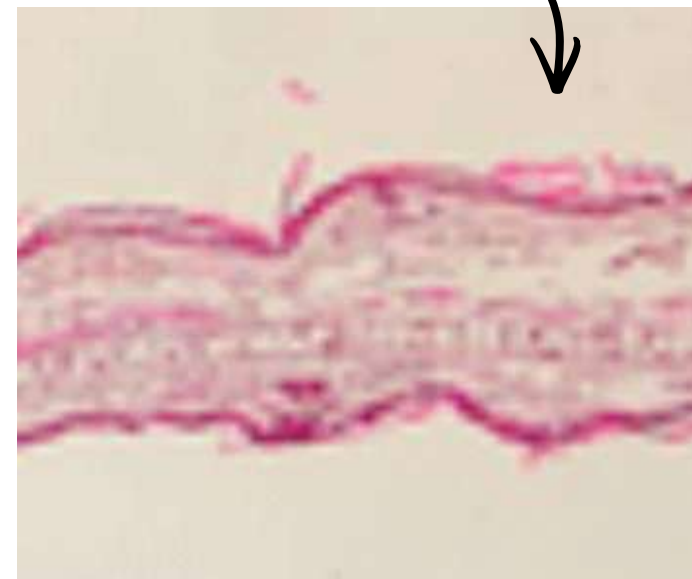
In bacterial challenge models relevant to acne, LZ1 peptide demonstrated **significant antimicrobial activity**, with low minimum inhibitory concentrations (MIC), together with a reduction in inflammatory cell infiltration following exposure to the bacteria.

Effect on acne evolution

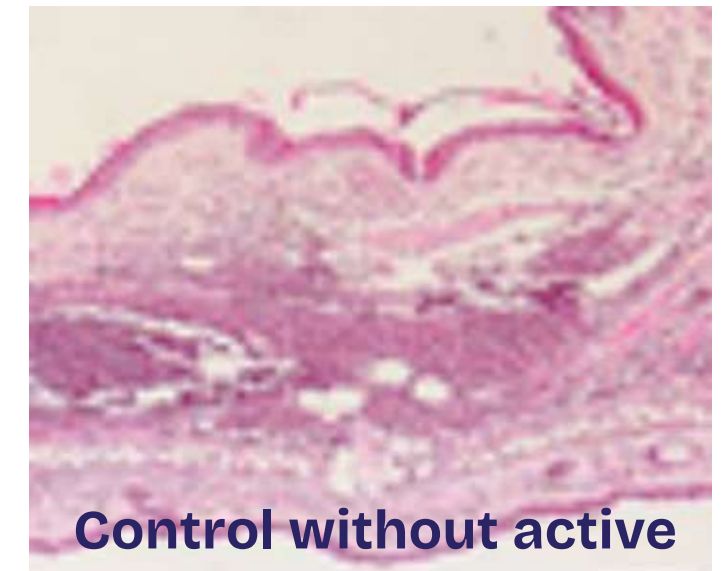
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Effect of 5% SCH PeptCare™ LZ1 peptide on acne evolution

Healthy control

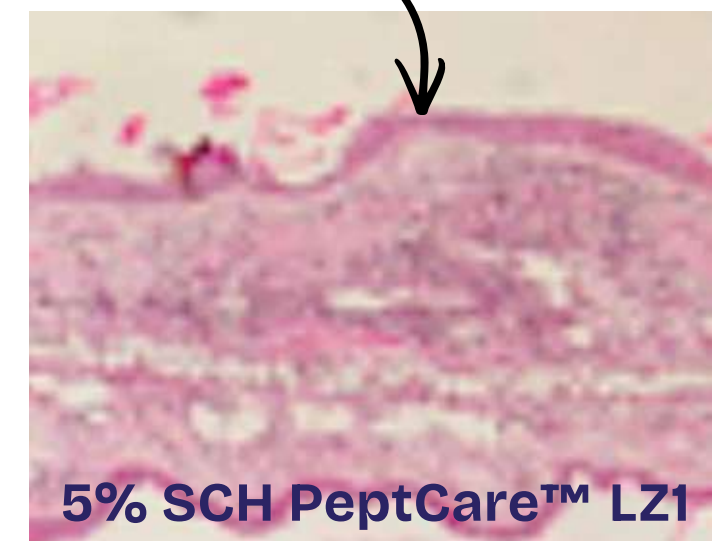


After 24h P. acnes challenge many infiltrated inflammatory cells were observed.



Control without active

No inflammatory cells after LZ1 peptide treatment



5% SCH PeptCare™ LZ1

Technical specifications

Available in powder and solution format

Recommended dose: 3 - 5% (1g/L of peptide in solution)

Regulatory status:

Europe → ALLOWED

China → NOT ALLOWED